JUNE 29, 1953 Pictures Persuade Passengers . . . p. 43

RAILWAY AGE

The Standard Railroad WEEKLY for Almost a Century

LEGISLATIVE REFERENCE

AUG 25 1953

Four railroads roll up new operating savings with grease-lubricated TIMKEN® bearings!

Operating tests prove TIMKEN bearings go full wheel-turning period without attention!

EXTENSIVE operating tests on passenger cars in regular service have proved that grease-lubricated Timken® tapered roller bearings on passenger cars and diesels can go from wheel-turning to wheel-turning without attention. One railroad actually ran grease-lubricated Timken bearings over 200,000 miles without adding lubricant.

Besides the big savings on lubricant, railroads can eliminate the man-hours previously needed for checking and adding lubricant between wheel-turnings. Four leading railroads have already rolled up new operating savings by switching from oil to grease for their Timken bearing equipped passenger cars. More than a dozen others are now getting favorable results from their wheel-turning to wheel-turning tests of grease-lubricated Timken bearings.

CONVERSION NO PROBLEM

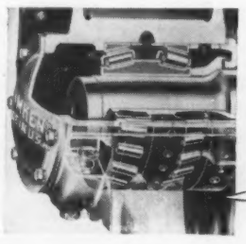
Timken bearings can be converted from oil to grease lubrication without modifying the bearings . . . without buying extra journal parts. And operating tests prove they're the only railroad journal bearing using an AAR-approved grease which can consistently go a full wheel-turning period without adding lubricant.

Let us help you investigate the cost-saving advantages of grease lubrication of Timken bearings on your railroad. Write The Timken Roller Bearing Company, Canton 6, Ohio. Canadian plant: St. Thomas, Ontario. Cable address: "TIMROSCO".

TIMKEN

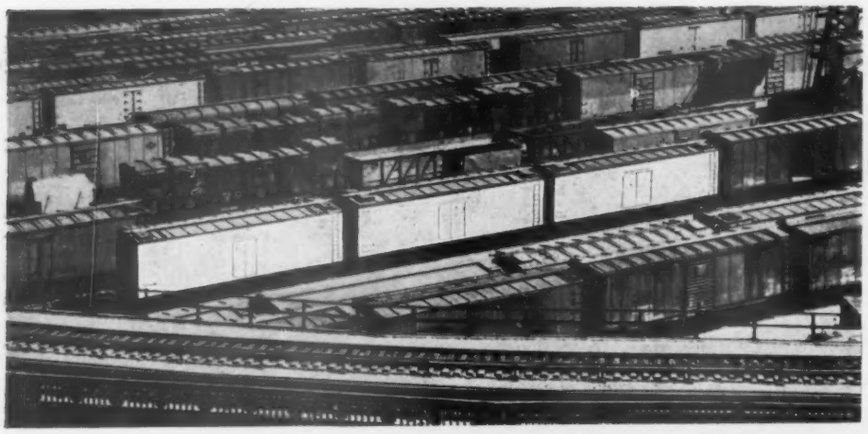
TRADE-MARK REG. U. S. PAT. OFF.

TAPERED ROLLER BEARINGS



GREASE ME AT ONE WHEEL-TURNING ...FORGET ME 'TIL THE NEXT!

NOT JUST A BALL ○ NOT JUST A ROLLER ⬭ THE TIMKEN TAPERED ROLLER ⬭ BEARING TAKES RADIAL ⊕ AND THRUST →⊕← LOADS OR ANY COMBINATION →⊕←



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Surrounded by hundreds of cars in a freight yard, drab-looking equipment is easily lost in the crowd. In a situation like this, is your rolling stock a stand-out or a washout?

Railroad men all over the country know that colorful, well-kept cars impress shippers . . . reflect sound, forward-looking management. That's why so many progressive railways are switching to DULUX Railroad Finishes to protect and brighten their equipment. Snappy, practical DULUX colors catch attention . . . proudly identify your cars everywhere.

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So don't take a chance on cars with a washed-out appearance. Make your equipment *sell* for you wherever it goes. Remember: *business grows where DULUX goes!*

85% **of America's leading railways use DUCO lacquer or DULUX enamel on passenger-train equipment.**

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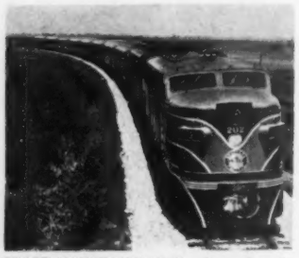
...through Chemistry

DUCO-DULUX
Railroad Finishes
CHEMICALLY ENGINEERED TO DO THE JOB BETTER

Finishes Products from DU PONT

Southern Pacific's popular SUNSET LIMITED hits new high in style with DULUX Finishes



SINCE AUGUST 1950, Southern Pacific's crack streamliner, *Sunset Limited*, has operated on a 42-hour schedule between New Orleans and Los Angeles. Offering the finest in passenger comfort and service, this red and silver speedliner always presents a luxury look—thanks to rugged DULUX.

COLOR HARMONY is the key to the pleasant sense of spaciousness passengers find in the *Sunset's* DULUX-finished bedrooms. DULUX is available in a wide range of stunning colors . . . makes planning interiors easy. And a DULUX interior is really durable. It can be washed time and time again . . . sparkles like new after every cleaning.

TASTEFUL DULUX colors harmonize with Audubon bird prints in this dining car on the *Sunset Limited* . . . help create an atmosphere of relaxation passengers appreciate.

Southern Pacific is only one of the many railroads that finish their "name" trains and regular equipment with Du Pont DULUX and DUCO Railroad Finishes. You, too, can depend on railway finishes made by Du Pont.

The Stand That Takes the Nuisance Out of Switch-Point Adjustment

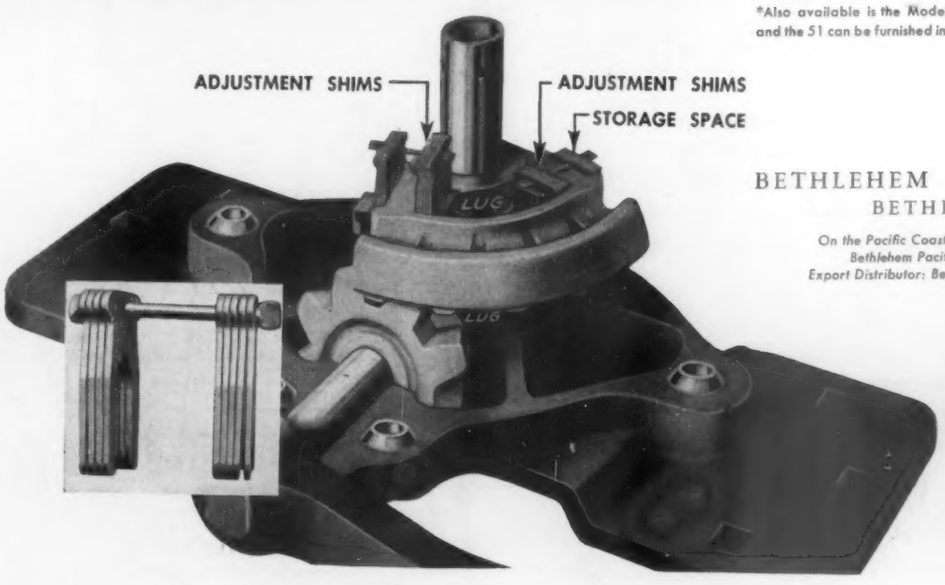
Adjusting points can be a nuisance and a time-waster. Yet where Bethlehem's New Century Switch Stand is used, there is nothing tough at all about the job.

The Model 51* makes possible switch-point adjustment by a simple device inside the stand itself. You merely slide back the cover, insert or remove a shim or two, and the job is done. Adding shims increases the throw of the points; removing decreases the throw. As shown in the cutaway photo, adjustment of movement in either direction can easily be accomplished.

The necessary shims are furnished with the switch stand, and spares can be kept in the handy storage compartments, where they are quickly available. It is virtually impossible to lose them.

But the New Century doesn't rely on any one device for its general effectiveness. For over 50 years, with few basic changes, it has been widely used by the country's great railroads—proof, we believe, that its principles are sound. You'll find it better than ever today for service with heavy rail—60-lb and up—in main lines, branch lines, yards. Ask for full details.

*Also available is the Model 50, a nonadjustable type. Both the 50 and the 51 can be furnished in a low design and an intermediate design.



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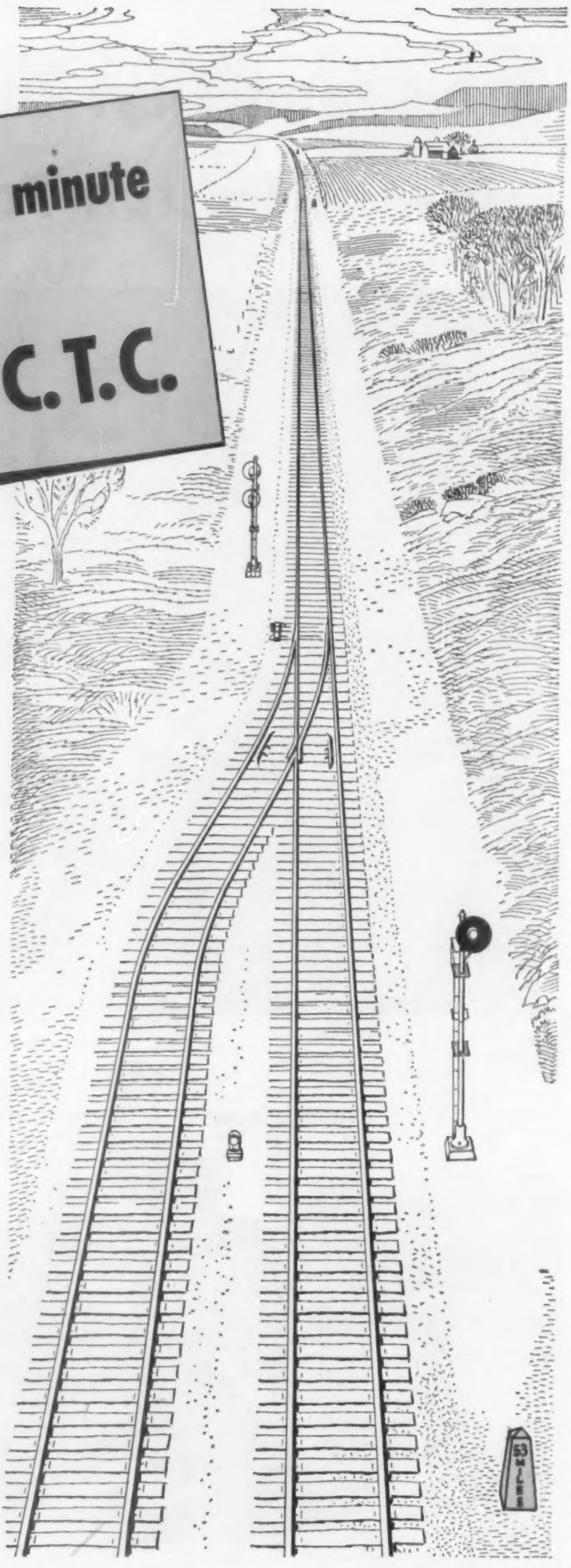

*Here's the record**

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1. Stops, slow-downs and delays reduced.
2. Average road time per freight train decreased 1 hour 45 minutes—or, an average of 1.07 minutes per freight train mile.
3. Cost of directing train movements reduced.
4. *Safety* of train operation *increased.*
5. Net annual saving in cost—$88,333.00.
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"UNION" Centralized Traffic Control can reduce terminal-to-terminal time with safety and pay its way through reductions in operating expenses. May we help you?

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SWISSVALE PENNSYLVANIA

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RAILWAY AGE

PUBLISHED WEEKLY BY THE SIMMONS-BOARDMAN PUBLISHING CORPORATION AT ORANGE, CONN., AND ENTERED AS SECOND CLASS MATTER AT PHILADELPHIA, PA. APPLICATION PENDING TRANSFER TO ORANGE, CONN., UNDER THE ACT OF MARCH 3, 1879. NAME REGISTERED IN U. S. PATENT OFFICE AND TRADE MARK OFFICE IN CANADA. EDITORIAL AND EXECUTIVE OFFICES AT 30 CHURCH STREET, NEW YORK 7, N. Y., AND 79 WEST MONROE STREET, CHICAGO 3, ILL. BRANCH OFFICES: 1081 NATIONAL PRESS BUILDING, WASHINGTON 4, D.C.—TERMINAL TOWER, CLEVELAND 13, OHIO.—TERMINAL SALES BUILDING, PORTLAND 5, ORE.—1127 WILSHIRE BOULEVARD, LOS ANGELES 17, CAL.—244 CALIFORNIA STREET, SAN FRANCISCO 11, CAL.—2909 MAPLE AVENUE, DALLAS 4, TEX.

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June 29, 1953 **Vol. 134, No. 26**

Week at a Glance

Some 5,000 Railroad and Supply Men, ladies and guests, were on hand for the opening day of last week's Atlantic City conventions of eight national and international railroad and railroad supply organizations. **11, 12**

Additional Service, coupled with reduced mid-day fares and larger parking facilities at key stations, is the strategy being used by the Pennsylvania to increase rail travel between Philadelphia and its more rapidly growing suburban communities. **13**

More Box Cars are likely to be wanted within the next few months, says Arthur H. Gass in his latest monthly report. Defense Transport Administrator Knudson thinks the railroads should order more; and the Pacific Coast Advisory Board wants more special "device" cars. **14, 15, 16**

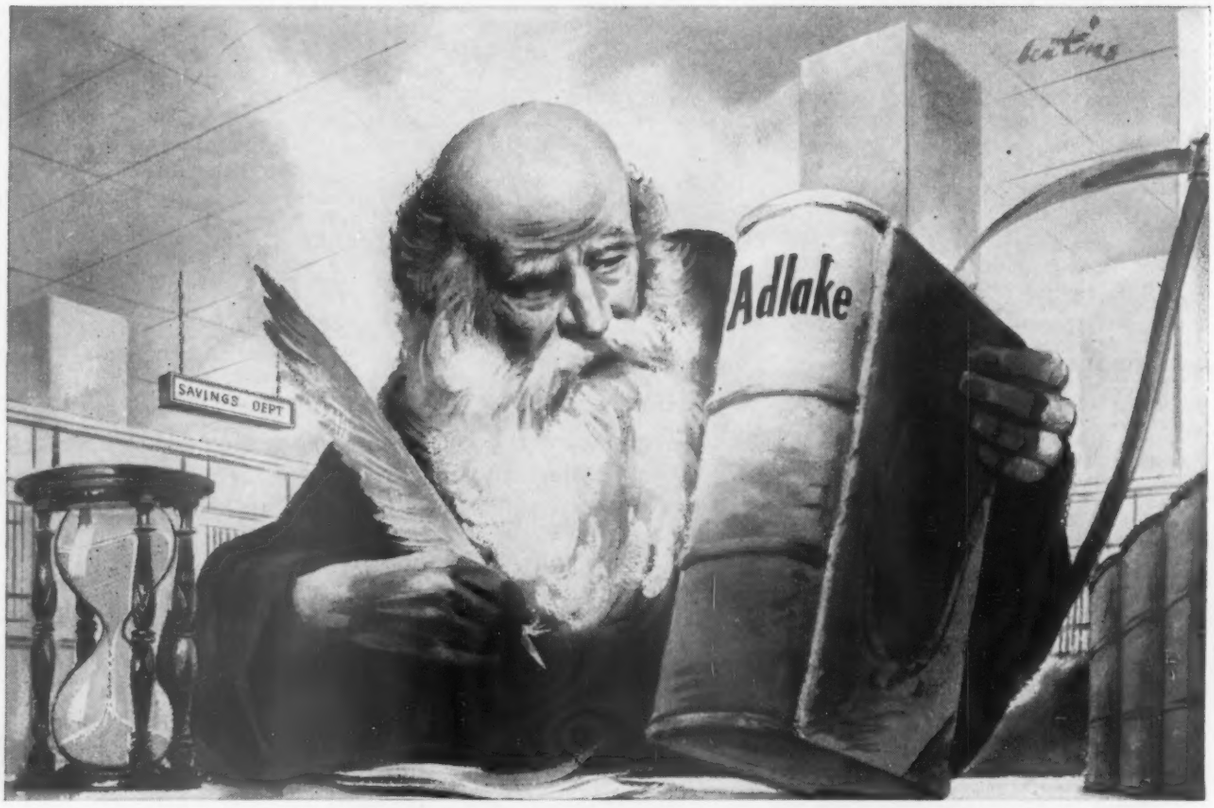
RAILWAY AGE FORUM

An Implied Invitation for railroads to tell the Administration, Congress and the public what revisions in government policy are needed to provide fair treatment for the railroads is our interpretation of a recent speech by Secretary of Commerce Sinclair Weeks. **41**

The Pressure Continues—so far unsuccessfully—on Long Island Trustee William Wyer, to yield to policies which could only end in socialization of that railroad. **42**

Camera Fans Can Be Salesmen—good salesmen—for railroad travel. All they need is the encouragement which many railroads are already profitably giving them. **43**

The Union Pacific Has Completed its Sherman Hill line change—using methods which present a vivid contrast



A *Century* of Experience invested in the Bank of Time...

The Adams & Westlake Company first began manufacturing for the transportation industry 96 years ago. That 96-year investment is paying you dividends! Here are three of them:

• **Dividend One**—The ADLAKE name, which has been an absolute guarantee of satisfaction for almost a hundred years.

• **Dividend Two**—The experience that can only come with time, and the craftsmanship that has become a tradition at ADLAKE and in the transportation industry.

• **Dividend Three**—Plant facilities that are unsurpassed throughout the industry! The ADLAKE plants at Elkhart offer 10 acres of completely modern manufacturing equipment ...and the skilled personnel to turn out products of the highest quality.

No wonder ADLAKE "Breather" Windows, Curtains, Hardware and Specialties are used by every major American railroad. For complete information on the ADLAKE line, drop a card to The Adams & Westlake Company, 1150 N. Michigan, Elkhart, Indiana. No obligation, of course.

Adlake 96th year of serving the transportation and building industries

THE Adams & Westlake COMPANY

Established 1857 • ELKHART, INDIANA • New York • Chicago

Manufacturers of ADLAKE Specialties and Equipment for the Railway Industry

Current Statistics

Operating revenues, four months	
1953	$ 3,501,192,177
1952	3,435,448,760
Operating expenses, four months	
1953	$ 2,653,394,534
1952	2,678,005,421
Taxes, four months	
1953	$ 422,061,274
1952	409,237,750
Net railway operating income, four months	
1953	$ 353,261,897
1952	291,319,179
Net income, estimated, four months	
1953	$ 264,000,000
1952	197,000,000
Average price railroad stocks	
June 23, 1953	64.46
June 24, 1952	62.98
Car loadings revenue freight	
Twenty-four weeks, 1953	17,297,598
Twenty-four weeks, 1952	17,245,476
Average daily freight car surplus	
June 20, 1952	18,709
June 21, 1952	24,246
Average daily freight car shortage	
June 20, 1953	4,109
June 21, 1952	2,678
Freight cars delivered	
May 1953	6,582
May 1952	6,857
Freight cars on order	
June 1, 1953	57,345
June 1, 1952	103,910
Freight cars held for repairs	
June 1, 1953	94,321
June 1, 1952	100,854
Average number of railroad employees	
Mid-May, 1953	1,217,472
Mid-May, 1952	1,242,922

RAILWAY AGE IS A MEMBER OF ASSOCIATED BUSINESS PUBLICATIONS (A.B.P.) AND AUDIT BUREAU OF CIRCULATION (A. B. C.) AND IS INDEXED BY THE INDUSTRIAL ARTS INDEX AND BY THE ENGINEERING INDEX SERVICE. RAILWAY AGE INCORPORATES THE RAILWAY REVIEW, THE RAILROAD GAZETTE, AND THE RAILWAY AGE GAZETTE.

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to those employed in the same area half a century ago. 46

The A.A.R.'s Newest Vice-President—Philip A. Hollar—brings to his job a varied background of experience in responsible railway, railway supply and governmental positions. 50

A "Model" Wheel Shop—in two senses of the word—is now in service on the Texas & Pacific. 52

First Convention of the new Railroad Public Relations Association was a "close-to-the-ground" affair, designed for every-member participation. 54

Ten Trains Daily are enough, the Seaboard Air Line finds, to justify an adapted C.T.C. system on its 163-mile Atlanta-Birmingham line. 56

BRIEFS

Reorganization of the I.C.C. along "functional" lines, as recommended in the Wolf report, will be opposed by American Trucking Associations. A.T.A. wants to have the Bureau of Motor Carriers continued in its present role as the commission's motor carrier "department."

Largest All-Diesel Railroad is now the 8,000-mile Southern System; its last scheduled steam-hauled train was a local freight into Chattanooga June 17. To "put out the fire" lighted 123 years ago by the "Best Friend of Charleston" on a Southern predecessor line has required expenditure of over $123 million on 880 diesel units.

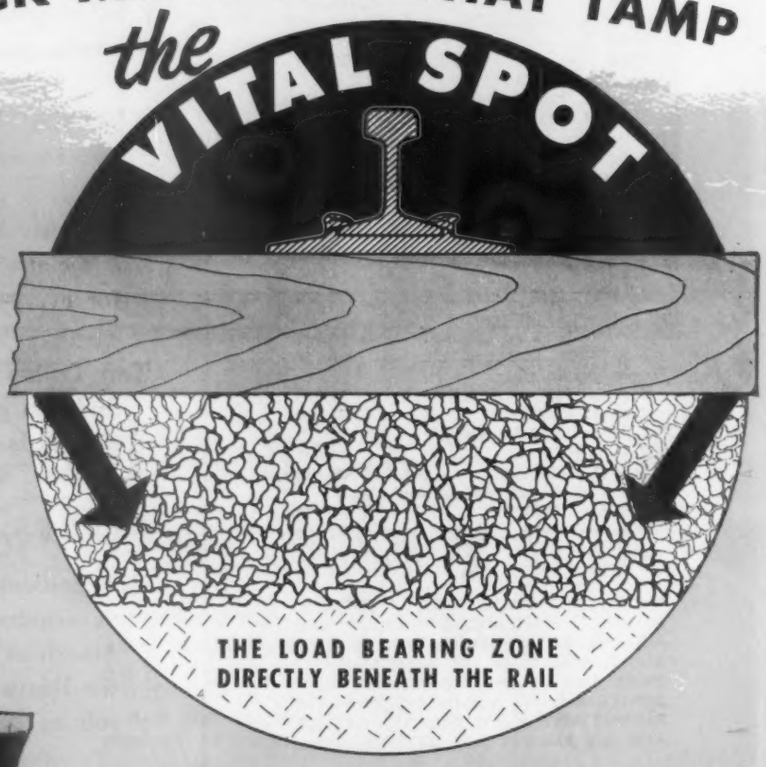
"An Attempt to Befuddle the issue, to suppress the truth and to postpone public demand for a calm and open examination of the facts about highway transport," is how Walter W. Patchell, Pennsylvania vice-president, has described the $250,000,000 suit brought by a group of big truckers against 31 Eastern railroads. Addressing the 42nd annual convention of the Pennsylvania State

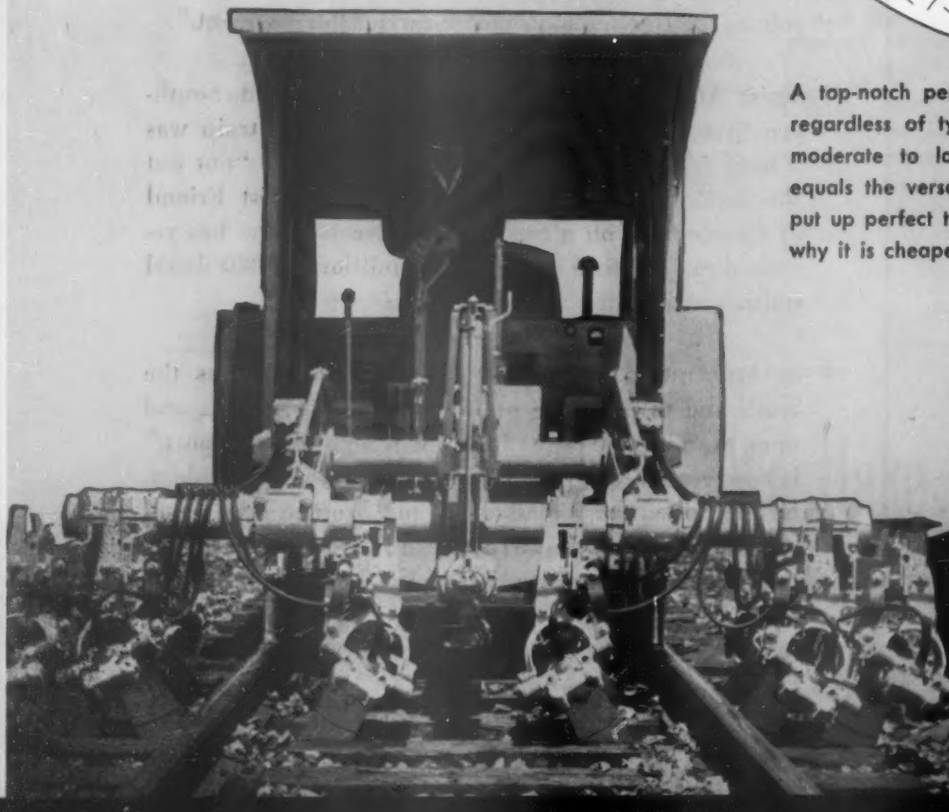
TO LOWER THE COST OF MAINTAINING TRACK *and* ROLLING STOCK . . .

Use JACKSON MULTIPLES

THE ONLY ON-TRACK MACHINES THAT TAMP *the* VITAL SPOT

See how the blades of the JACKSON penetrate and tamp directly beneath the rail, that vital area where greatest weight is imposed. No other on-track tamper is built to do this, and therefore no other can give you the thorough consolidation of ballast at this all-important point and consequent longer-lasting job that the JACKSON achieves. The net result is track that requires considerably less maintenance — that stays smooth even under very heavy high-frequency traffic — that's kind to rolling stock and reduces the cost of maintaining it.





A top-notch performer in any major ballast inserting operation, regardless of type of ballast used, and equally efficient in the moderate to low-lift surfacing operations, no other equipment equals the versatility of the JACKSON MULTIPLE or its ability to put up perfect track at the lowest cost per mile. Let us show you why it is cheaper to own them than to do without them.

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LUDINGTON, MICH.

Week at a Glance CONTINUED

Association of Boroughs, Mr. Patchell added that such an examination would lead to "a fair sharing of highway costs."

The Speed of Modern Harvesting Methods is becoming a major problem in handling the annual wheat movement, H. J. Gramlich, director—agricultural & forestry development of the Chicago & North Western, told the Trans-Missouri-Kansas Shippers Board at its annual grain meeting in Wichita June 11. "In years gone by, the wheat harvest extended over many weeks, enabling country elevators, terminal elevators, mills and railroads to absorb the crop in stride and with a minimum of confusion. By contrast, in 1952 farmers in Kansas harvested more than half of an all-time record crop in a week's time."

Another Benefit of Dieselization—at least under certain circumstances—may be higher fares. As a case in point, the Lackawanna has just been authorized to increase commutation fares on its Boonton branch to the level prevailing on its electrically operated suburban lines. Reason for the increase was that conversion of the Boonton branch from steam to diesel power—completed June 6—will "provide operation . . . comparable to that on electrified lines."

The So-Called "Trip Leasing" Bill (H.R. 3203), which would prohibit the I.C.C. from regulating trip-leasing of motor trucks, was passed by the House last week. It has now gone to the Senate, where it has been referred to the Interstate Commerce Committee. As yet, no hearings have been scheduled.

The Family Fare Plan Idea seems to be spreading. It is reported that American President Lines—large operator of trans-oceanic passenger steamship services—is considering a "family cruise plan" for use on a Christmas-New Year's voyage of the S.S. President Wilson. The plan calls for a full fare for the head of the family, half-fare for other family members between 12 and 21, and quarter-fare for children under 12. Also, it is rumored that a large western railroad is considering intoducing a family fare plan in its territory.

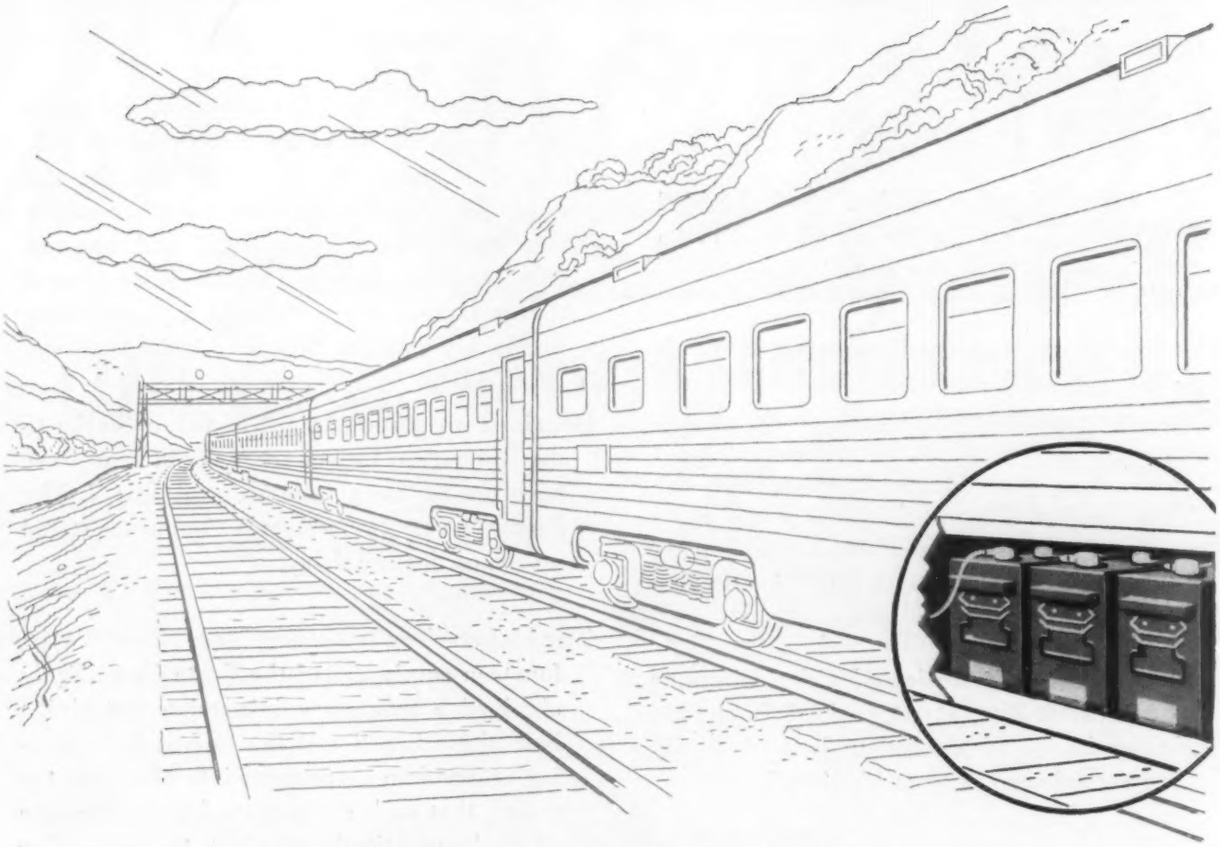
Hearings on Appointment of Owen Clarke to the Interstate Commerce Commission have been put off from June 30 until July 7. The Senate Interstate Commerce Committee stated no reason for the delay.

The Union Shop Is Getting More Court Tests; fourteen employees of the Santa Fe in Texas obtained a temporary injunction restraining both the railroad and the unions from placing union shop agreements into effect, on the theory that such agreements deprive the men of their constitutional right to work. Five Union Pacific employees have obtained a similar temporary restraining order in Nebraska. Similar actions have been previously reported in Virginia, North Carolina and Georgia.

Stepped Up Training for 800 passenger department employees across Canada is now under way on the Canadian National. "Blue prints" for the program, which includes training for customer and human relations, as well as job skills, and supervisory training as preparation for advancement to senior posts in the company, have been mapped out at Montreal headquarters.

"We as an Industry Have an Obligation to consider l.c.l. freight, to make up our mind whether we want it or not, and if we do, go out and get a portion of it back."—*From an address to the New York Society of Security Analysts by Perry M. Shoemaker, president, Delaware, Lackawanna & Western.*

when light weight **is important...**



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DEPENDABLE POWER on the road is an outstanding characteristic of EDISON batteries for air-conditioning, car-lighting and other modern electrical services on today's passenger-train cars. High road capacity, quick capacity recovery following discharge intervals and freedom from both finish-rate and discharge limits are just a few of the operating advantages of EDISON batteries.

LONG LIFE FOR TRUE ECONOMY has been the experience of both large and small roads who equipped their passenger, head-end, or caboose cars with EDISON batteries. Many report an average service life of 18 to 25 years. For the up-to-date facts on today's finest railroad batteries, write for your copy of Bulletin SB 3802 and the name of your nearest Edison field engineer. Edison Storage Battery Division of Thomas A. Edison, Incorporated, West Orange, N. J.

Most Dependable Power—
Lowest Over-all Cost
...you get <u>both</u> with an EDISON

EDISON

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STORAGE BATTERIES

RR Groups Meet at Atlantic City

Nearly 5,000 register on first day of coordinated conventions of eight national and international railroad and railroad supply organizations

Keynoted by William T. Faricy, president of the Association of American Railroads, as "truly an all-American assembly," coordinated meetings of eight national and international railway and railway supply manufacturers' organizations got under way on schedule at Atlantic City, N.J., on June 22, with a total first-day registration (to 3 p.m.) of nearly 5,000 railway and railway supply men, ladies and guests.

Beside the A.A.R. itself, organizations participating in the week-long gatherings included its Mechanical and Purchases & Stores Divisions and its Electrical Section; the American Short Line Railroad Association; the VIII Pan American Railway Congress; the Railway Business Association, and the Railway Supply Manufacturers' Association, which staged a "$20-million" indoor and outdoor exhibit of railroad equipment and supplies.

Mr. Faricy, addressing the opening-day joint session of the Mechanical and P. & S. Divisions, underlined the international character of the conventions by pointing out that: "There are men here of more than a score of countries, speaking different languages, faced with different conditions, approaching their problems from different viewpoints—but alike in the one essential particular of connection with railroads."

"Splendid Progress"

Further underscoring the international nature of the proceedings was an address—delivered at the same joint session at which Mr. Faricy spoke—by Atilio Cappa, of Buenos Aires, Argentina, acting president of the P.A.R.C. Association. Paying tribute to "the ability, the intelligence, and the unlimited will to work of the American railroad industry," Mr. Cappa said in part:

"We who come from the other end of the hemisphere . . . again have the opportunity to appreciate the results of healthy competition and of the importance of man's finding a challenge in order to further his progress . . . to free man from slavery.

"At the exhibit we can appreciate . . . the splendid chain of progress of the American railroad industry and of American universities and their laboratories. Both have contributed to the unfaltering advance of the techniques of railway transportation in the United States—indeed in the whole world. . . .

"It remains for me only again to express publicly . . . my gratitude for all the courtesies that have been showered upon us . . . I express the hope that this great exhibit will be crowned with complete success and that it will redound to the benefit of ever greater and more consolidated progress in railroad transportation, which will be with us for many centuries."

"Have Met the Challenge"

Presiding at the session at which Messrs. Faricy and Cappa spoke was C. W. Floyd Coffin, president of the R.S.M.A. Calling attention to the fact that "there have been many changes since our last convention just six years ago," Mr. Coffin pointed out that the railroads "have always counted on associations such as the R.S.M.A. to provide the means" with which to furnish "the best, safest transportation available." That "we have ever met that challenge," he continued, "is evidenced by the exhibits you will see during the week. . . . The importance of this convention to the economy of our country should not be minimized."

Other speakers who had addressed various sessions of the several coordinated meetings prior to press time for this issue of *Railway Age* included J. H. Aydelott and P. A. Hollar, vice-presidents of the A.A.R.; Interstate Commerce Commissioners William J. Patterson and Hugh W. Cross; William White, president of the New York Central; J. M. Symes, executive vice-president of the Pennsylvania; H. T. Cover, assistant vice-president (operating) and chief of motive power of the PRR, and chairman of the Mechanical Division; and V. N. Dawson, assistant purchasing agent of the Baltimore & Ohio, and chairman of the Purchases & Stores Division. Mr. Cross' address, made to the Short Line Railroad Association, is separately reported on the following page.

Mr. Aydelott, emphasizing the importance of continuing research and the value of "the cooperation of the supply industry," said that American railroads have produced transportation "at costs which are unequaled anywhere in the world," and which "have made it possible for America to establish industrial supremacy." But, he continued, "the railroads feel they are entitled to a more realistic treatment of their earnings needs by the regulatory bodies of the states and the federal government. . . . In the hope and belief that the public interest will require that all transportation agencies supply service on a truly competitive basis . . . the railroads are planning to continue making large expenditures under their modernization programs."

Citing increases in railroad efficiency, Mr. Hollar called on P. & S. Division members for a program "beyond the line of duty," to educate the public generally and the railroad supply industry in particular on the "facts of life" as to the railroads' financial status.

"Must Do More with Less"

Mr. Symes emphasized to Mechanical Division members the importance of "doing more with less," by achieving "higher standards of performance in utilization of money, manpower and materials." He also urged a "simple and understandable system of cost accounting for chief mechanical officers."

"One of the biggest challenges that each railroad officer faces is the training of a proper group of employees to fill in and move into key positions," Mr. Cover said.

Mr. White, also addressing the Mechanical Division, declared that "railroading is a business . . . operated for the primary purpose of making a profit," which, he said, means that "railroad service has to be sold in volume." "There is no reason," he also said, "to expect within the foreseeable future any new development comparable to dieselization as a factor in cutting costs of operation. The hope for future economies lies in many smaller, less spectacular innovations," and possibly, in Mr. White's opinion, in wider application of "industrial engineering principles."

Mr. Patterson renewed his advocacy of legislation to give the I.C.C. authority over maintenance and testing of air brakes, and over railroad signal and communications systems.

NEXT MEETINGS

The 1954 meeting of the A.A.R.'s Mechanical Division, and of its Electrical Section, will be held at the Hotel Sherman, Chicago, June 29-July 1, with no exhibit. The Mechanical Division's 1955 meeting will be at the Mount Royal Hotel in Montreal.

The next meeting of the Pan American Railway Congress has been scheduled for Buenos Aires, Argentina, probably in March or April 1956.

"You Can Help the Commission!"

There are many ways to reduce our work load, Commissioner Cross tells members of Short Line Association

The work load of the Interstate Commerce Commission may be measurably relieved through cooperation of practioners and the carriers they represent, Hugh W. Cross, a member of the commission, told the American Short Line Railroad Association at Atlantic City last week.

"The commission is not given sufficient credit for its accomplishments over the years in effecting greater expedition and efficiency in its work," he said. Development of modified procedure in the twenties, use of verified statements in the thirties and the more recent development of the pre-hearing conference have helped immeasurably, he declared, adding that the latter was "potentially the most effective means of reducing unnecessary expense and volume of record." But its success, he pointed out, depends upon "firm direction of the conference by the hearing officer and whole-hearted cooperation by counsel."

As an example of unnecessary work for the commission's staff, he cited Ex Parte 175, now again before the I.C.C., wherein six verified statements have been filed by different government bureaus and departments. "I submit that every effort should be made by government counsel to coordinate and condense their presentations to the public interest," he commented.

Other "makework" tactics he cited were: (1) Inadequate preparation by counsel which contributes to long records; (2) deliberate dilatory or obstructive tactics; (3) the loose practice of incorporation into the record by reference of voluminous statistical data, "which has resulted in inclusion of quantities of immaterial evidence"; (4) the method of presenting scientific and economic evidence by testimony of expert witnesses; and (5) the problem of long transcripts. He also cited "duplicative or wasteful direct and cross examination." These matters, he said, can only be improved "either by voluntary action of the parties or by action on our part. We prefer the first course of action."

What About Statistics?

"It is not fully appreciated that railroads, and all other carriers subject to our jurisdiction, as well as the public, rely heavily on the commission for the great bulk of their statistical information," Mr. Cross pointed out. To the suggestion that this work might be undertaken by carriers themselves, he commented: "Assuming that such a [statistics-compiling] organization were practicable, there would always remain questions as to the reliability of figures which could voluntarily then be collected and compiled."

Hitting at critics of the commission's efficiency in handling work assigned to it, Mr. Cross pointed out that, despite a marked reduction in staff, and a serious problem in obtaining trainees to eventually replace examiners who are either at or fast approaching retirement age, the commission's performance is far superior to that of similar agencies in the field of administrative law.

Reorganization

Commenting on the "Wolf Report," which "in no way attacked the integrity or the commission, its policy of regulation, or its inherent working relations with the carriers," Mr. Cross said that "not even enactment of the Motor Carrier Act in 1935 called for such sweeping changes in functional operations of the commission as are *now* about to be undertaken. Few will deny that reorganization of the internal working functions of the commission is timely, though many may protest diverse steps in attainment of the objectives."

The largest step, he said would be to transfer administrative functions from individual commissioners to a managing director. Next, "subject to study," is a re-grouping of the present 15 bureaus "so that in addition to three general staff offices of administration, law and secretary, there will be a

SHORT LINE ATTENDANCE

As of noon June 23, the American Short Line Railroad Association reported registration of 180 member line representatives, covering 123 member lines. These figures did not include more than 100 ladies and a number of guests. James M. Hood, president, presided at all sessions, assisted by C. A. Miller, vice-president and general counsel, and C. E. Huntley, secretary-treasurer.

Lexington, Ky., Herald-Leader

FOUNDING OF THE "LEXINGTON GROUP" 11 years ago was marked by the placing of a commemorative plaque on the wall of the "coffee room" of the Hotel Lafayette, in Lexington, Ky., where the informal group of persons interested in railroad history was formed May 7, 1942. Shown here, examining the plaque, are (left to right) Robert S. Henry, vice-president—public relations, Association of American Railroads; Dr. Richard C. Overton, professor of business history, Northwestern University, and chairman of the group; and Dr. Frank Heck, professor of history, Centre College. General theme of the group's 11th annual meeting, held at its birthplace, was "Chapters of Railway Development in the South"; particular honor was paid to the Gulf, Mobile & Ohio and to its upbuilding from a tiny logging road to a major system.

lesser number of specialized administrative bureaus operating along functional lines." Other steps, he said, include broader use of boards—like those already handling Fourth section and suspension matters—to handle "laborious detail now handled by commissioners"; increased attention to budgetary and personnel problems; and, finally, but most necessary, an appeal for funds for additional examiners to take care of the staggering backlog of cases.

Ocean Steamship Keeps N.Y.-Savannah Set-Up

Division 3 of the Interstate Commerce Commission will not allow Eastern and Southern railroads to cancel their joint rate and through route arrangements with Ocean Steamship Company, insofar as they apply to service between New York and Savannah, Ga.

The division did authorize the roads to cancel joint rates and through routes in connection with service between Boston, Mass., and Savannah.

Ocean Steamship, a subsidiary of Central of Georgia, has not provided service since 1942, and at the present time owns no ships. It has no plan for resuming the pre-war Boston-Savannah service.

As to the New York service, the steamship company is awaiting the outcome of another proceeding now before the I.C.C.—one in which Seatrain Lines seek permanent authority to operate between New York and Savannah. Seatrain now holds such authority temporarily.

If Seatrain is denied permanent authority, Ocean Steamship expects to resume its own coastwise service. This would probably be a "Seatrain-type service" instead of the former break-bulk operation. In view of this possibility, the steamship company opposed the railroad proposal.

The I.C.C. proceeding was docketed as I.&S. No. 5946. The railroads initiated the case in 1951, at a time when Seatrain was seeking I.C.C. permission to purchase the operating rights of Ocean Steamship.

Supreme Court Action

The Supreme Court has ruled against the New York, New Haven & Hartford in a claim case involving the loss of baggage. Mrs. George Nothnagle entrusted her bag to a redcap while changing trains at New Haven, Conn., on October 5, 1949. When the bag was lost she sued the carrier for $615—full value of the contents (*Railway Age*, March 23, page 13).

Lower courts decided in favor of Mrs. Nothnagle, and New Haven appealed. The road argued that applicable tariff provisions limited its liability to $25, "unless a greater value is declared in writing." The court found that no baggage check reciting this limitation was given to Mrs. Nothnagle; and it ruled that she was not bound by a provision "which she had no reasonable opportunity to discover."

Operations

PRR Expands Suburban Service

Adds many new trains, reduces off-hour fares in effort to increase traffic volume in growing Philadelphia territories

The number of trains in weekday suburban service between Philadelphia and Media has been increased 50 per cent, between Bryn Mawr and Philadelphia, 26 per cent, and between Paoli and Bryn Mawr 10 per cent, in a broad program of improvements inaugurated June 28 by the Pennsylvania.

Monday-through-Friday schedules between Bryn Mawr and Philadelphia increase the number of trains from 73 to 92, and between Paoli and Bryn Mawr from 73 to 80. In addition to many new station stops, the new services provide additional express trains during both commuter and non-rush hours between Bryn Mawr and Philadelphia, which give faster service between stations further out, where local stops will be made, and the city. Frequency of service during non-rush hours is increased from two trains to three trains each hour.

On the Media branch, the number of trains will be increased from 45 to 71 east of Media, with shuttle service beyond Media to West Chester. The new trains give daytime, non-rush hour service every 30 minutes, as compared to the present hourly basis.

The railroad also is surfacing parking spaces for more than 300 additional automobiles at a number of "Main Line" stations and 100 additional at Media; a substantial increase in number of people "taking the train to town" is expected as a result of the increases in service, and introduction, also on June 28, of special one-day, non-rush hour round-trip "thrift tickets" at fares 25 to 36 per cent below existing fares (*Railway Age*, June 15, page 14).

Service improvements on the two lines, together with reduced fare tickets, are innovations dictated by more than a year's study of population trends and suburban transportation needs, according to T. J. Costello, manager of suburban service. The study was conducted jointly by the consulting engineering firm of Robert Heller & Associates and the railroad's traffic and transportation officers. The Philadelphia-Media and Main Line services were chosen to test the innovations because, in addition to other factors, large increases in population along those lines offer the potential passenger volume necessary to successful operation of such increased suburban train service, Mr. Costello indicated.

Hopes to "Reverse Trend"

"In recent years, the trend has been away from patronage of suburban trains and it has been necessary to reduce train service to accommodate the smaller volume," he declared. "Now, mounting traffic congestion, shortages of parking space in center city, costs of operating private automobiles and lack of any other single public service between these suburban points and downtown, provide hope that by improved rail service and aggressive selling there is a chance to reverse that trend."

To allow these service expansion plans with existing equipment requires rearrangement of service beyond Media. Passengers at the 12 stations on the 13-mile stretch beyond Media will be served by shuttle trains to and from Media. "Less than 10 per cent of all present passengers on the line come from the area beyond Media," Mr. Costello pointed out.

Mr. Costello set at $178,000 the Pennsylvania's expenditures required at Media as a result of the change in service plans. That figure covers cost of relocating and installing new tracks, construction of a transfer platform between tracks, erection of a new trainmen's locker room, changes in the switch interlocking set-up, and overhead wiring and signal changes. An additional $12,617 is being spent for increasing parking facilities at Media by 100 cars, he said.

Population Increases

Studies showing that Main Line population increases have been greatest from Bryn Mawr east, plus the fact that 69.4 per cent of present passengers come from stations between Bryn Mawr and Philadelphia, lie behind the decision to further increase attractiveness of service in that area. Track and switch work, plus new signal installations, costing $16,000, will enable the PRR to add and turn many trains at Bryn Mawr, thus concentrating Main Line service in the area of greatest population. Growth of the area west of Bryn Mawr to Paoli has been rapid enough, however, to present a volume potential fully justifying increases in service on that segment of

the Main Line also, Mr. Costello pointed out.

In a move to improve its freight service, the Pennsylvania has inaugurated two new through freight trains from Pittsburgh to Chicago, providing daily service from all parts of the Pittsburgh district. The twin trains are both called "The Steeler"; each has early-morning departure with arrival at Chicago scheduled for early the following morning.

Expects More Calls for Box Cars

"Initial shortages" showing up in high-class and 50-ft. cars, Gass says in monthly report; anticipates "complicated" grain movement

There are indications that box car supplies will tighten during the summer and fall months, A. H. Gass, chairman of the Car Service Division, Association of American Railroads, said in his latest report on "The National Transportation Situation."

Initial shortages have shown up in high-class and 50-ft. box cars, Mr. Gass reported. For the week ended June 6, the average daily shortage for this class of car was 2,190. At the same time there was an average daily surplus of 12,190 in "rough loaders" and grain boxes stored in preparation for the grain movement.

The C.S.D. chairman said movement of some 28 million bushels of grain into ship storage at New York, Baltimore, and Norfolk, Va., complicates grain handling this year. The Commodity Credit Corporation has arranged to use 125 Liberty ships for grain storage—75 at New York, 35 at Baltimore and 15 at Norfolk.

"This movement in itself would present a transportation problem but, coupled with the new harvest and the movement of old grain to terminal elevator facilities, the problem is multiplied," Mr. Gass declared.

Agriculture Department forecasts on June 1 placed this year's winter wheat crop at 770 million bushels, he added.

Commenting on the supply of open top cars, Mr. Gass noted that surplus supplies of hoppers and high-side gondolas are being reduced. Loadings in recent weeks have been above the 1952 level. He said plain flats remain in "generally tight" supply, and demand for special-type flat cars continues heavy. He reported the supply of covered hoppers as "reasonably good" in most areas.

Class I railroads installed 6,220 new freight cars in May, Mr. Gass said. This was their second best month in a year, December having exceeded this figure by 90 cars.

Freight car retirements, meanwhile, amounted to 4,563 during May. This was "slightly less than the monthly average for the past few years."

Detention reports from railroad agents indicated that cars detained beyond free time of 48 hours averaged 16.70 per cent of those placed in May. That compared with 15.85 per cent in April, and 14.62 per cent in May of last year.

Net ton-miles per serviceable car per day averaged 968 in April. This was higher than any previous month this year, and reflects the normal seasonal increase in freight car demand, Mr. Gass said.

SPECIAL PREPARATION of box cars for the big annual grain movement is just one of the many little-publicized jobs that are required to provide good—in this case, sanitary—transportation. At the left, a cleaned car is being sprayed with residual insecticide before it is lined with paper; at the right, a car is being checked for possible insect infestation.

UP Extends Fast L.C.L. Service to Salt Lake City

Heartened by the four-fold increase in traffic generated by its new overnight service between Los Angeles and Las Vegas, Nev., the Union Pacific has extended its fast Los Angeles merchandise service to give second-morning store-door delivery in Salt Lake City.

The new service will, according to John W. Padden, UP's Los Angeles traffic manager, have a schedule "as fast or faster than highway trucking with rates comparable with and competitive to the trucking industry."

High-speed, roller-bearing cars will be used to provide the service, which will include free pick-up service for southern California shippers. The second-morning free delivery service will be extended to receivers in Ogden, Provo, Geneva, Ironton, Nephi, Payson and Spanish Fork, in addition to Salt Lake City. Pick-up and delivery services will be operated by UP trucks, and will be available Mondays through Fridays only.

Grain Storage a Problem In Southwest This Year

A large surplus of storage grain on hand, with the threat of more surplus to come, is presenting a real storage problem, M. J. Hudtloff, manager of the Transportation and Warehousing branch of the U. S. Department of Agriculture, told the Southwest Shippers Advisory Board at its 93rd regular meeting in Oklahoma City.

"Agricultural production," he said, "has, in general, caught up with the post-Korea demand and in some important cases has already run ahead of it. Current needs have been met, reserves have been built, and once again we face the problem of surplus. Coupled with this is the sharp falling off of exports of some of our most important crops.

"The latest estimate of the Bureau of Agricultural Economics indicates that the 1953 crop of both winter and spring wheat may be more than one billion bushels. The expected carryover of old wheat on July 1 is 575 million bushels, which means that for this marketing year there probably will be a total wheat supply of approxi-

mately 1.6 billion bushels to be disposed of, stored and transported."

Mr. Hudtloff stated that his department has arranged for use of 125 ships from the U. S. Maritime Commission's fleet of stored ships, for emergency grain storage in the Hudson and James rivers. In denying rumors that the government plans to use box cars for grain storage, he told of a recently announced "resealing program" designed to keep as much Commodity Credit Corporation loan grain as possible on or near the farm, by extending loan maturities by one year.

Shippers Say Car Efficiency Efforts Producing Results

Cooperative efforts of railroads and shippers to improve car utilization and and efficiency are getting results, the Central Western Shippers Advisory Board was told at its meeting in Denver, June 3-4. J. R. Wildman, traffic manager of the Adolph Coors Company, and chairman of the Car Efficiency Committee, reported this to be the consensus of opinion of shippers in the board's territory who replied to a questionnaire recently circulated. Responding shippers generally feel that railroad line haul, car cleaning, and general service has shown improvement over last year—but that there is still too much delay in getting cars through terminals.

Bruce W. Dwinnel, vice-president and general counsel of the Chicago, Rock Island & Pacific, addressed the gathering at the main luncheon on the dangerous moral breakdown in courts of law where fraudulent personal injury suits are on the increase.

Pacific Board Asks More Device Cars

A resolution advocating "that all carriers should assume their proper share" of purchases of "specially equipped box cars," such as "Compartmentizer" or "DF" cars, was adopted by the Pacific Coast Shippers Advisory Board at its 91st regular meeting at Los Angeles, June 11-12. Such cars are necessary, the resolution said, "to prevent damage to lading under present methods of operation."

Judge Wilson McCarthy, president of the Denver & Rio Grande Western, speaking at a June 12 joint luncheon of the board and several Los Angeles traffic organizations, told his audience not to "sell the railroads short. They may be diffident, but they are not decadent."

"Everyone in the railroad industry [he continued] is touched by the same kind of magic that gets into the blood of an actor who has played before the footlights, or a newspaper reporter who has covered the police beat. It stems from the glorious exploits of early railroad builders. . . .

"Yet today I would rather speak to you of the little publicized group whose names as yet are unknown but who are quietly and effectively pioneering new railroad frontiers. They are probing management practices, human relations and the technical sciences. And translating them into a new high in transportation efficiency. . . .

"Today the advanced management courses at the Harvard Business School contain a greater proportion of railroad executives than any other single group.

"Railroads recognize that their vitality depends on how well the human element is exercised. Railroad men and women are being taught how to become effective workers for their industry. Understanding of railroad problems by all personnel and ability to translate that understanding to the public results in better service. A happy family is an effective business and social force. That's why railroads are so seriously seeking to improve human relations among their employees. . . .

"The railroads . . . haven't told their whole story and they do have a wonderful story to tell."

WILLIAM WHITE, President
New York Central System, tells why
A Railroad is like an Apple Tree...
To make New York Central produce still finer passenger and freight service for you, we must prune away the unneeded, little-used trains that waste this Railroad's strength.

"NOT EVEN the strongest railroad can go on investing in progress when its strength is drained by a $51 million annual passenger train service deficit. That is why we *must* prune out unneeded, money-losing trains. For only then can everyone—passengers, shippers, workers and shareowners alike—enjoy the full fruits of quality railroading." So, in part, said the text portion of a recent New York Central newspaper advertisement which was headed by the drawing reproduced above.

Car Service Orders

I.C.C. Service Order No. 856, which provides for inclusion of Saturdays in computing demurrage, has been modified by Amendment No. 6. This amendment, effective as of June 20, suspends until August 31 the order, to the extent that it applies to Class "TM" tank cars.

Fifth Revised Service Order No. 95, which appoints D. W. Benton the commission's agent on matters relating to refrigerator cars, has been modified by Amendment No. 1. This sets back the expiration date of the order from June 30 until November 30.

I.C.C. Service Order No. 865, which imposes super-demurrage charges, has been modified by Amendments 36 and 37. No. 36 set back the order's expiration date from June 30 to September 30. No. 37 continued in effect (also until September 30) provisions which suspend the order's applicability to all cars except flats, covered hoppers, and bulk-loading container cars.

I.C.C. Service Order No. 866, which prescribes operating regulations for movement of freight cars, has been modified by Amendment No. 8, which set back the expiration date from June 30 to September 30.

I.C.C. Service Order No. 869, which restricts the use of refrigerator cars for commodities other than perishables, has been modified by Amendment No. 8, which set back the expiration date from June 30 to September 30.

I.C.C. Service Order No. 873 has been modified by Amendment No. 6, which set back the expiration date from June 30 to September 30. The order makes Richard H. Lambertson

A LINE-CHANGE and grade-revision project is being carried out along the Mississippi river to eliminate curvature and prevent flooding of the main track of the Missouri Pacific near Glen Park, Mo., on its line between St. Louis and Little Rock, Ark. Approximately three-fourths of a mile long, the project involves cuts as deep as 120 ft. and a fill 60 ft. high.

the commission agent with authority to control movements of tank cars.

I.C.C. Service Order No. 887 has been modified by Amendment No. 3, which set back the expiration date from June 30 to September 30. This order authorized substitution of up to three SFRD, PFE, or WP refrigerator cars (not suitable for transporting perishables) in lieu of each box car ordered for shipments within the area embraced by the states of Oregon, California, Arizona and Nevada.

Knudson Thinks Railroads Should Order More Cars

Defense Transport Administrator James K. Knudson is concerned about the drop-off in freight car orders in recent months. His concern was reflected in a June 18 speech in which he said the number of cars on order "has remained rather disappointing, to the point where something may have to be done about it."

Speaking before delegates at the VIII Pan American Railway Congress, Mr. Knudson said the steel shortage problem has been replaced by a more difficult one—that of inducing carriers to order cars in sufficient numbers.

"In mid-1950 the Class I railroads committed themselves to a program of building up our car supply from 1,724,000 to 1,850,000," Mr. Knudson said. "By January 1953 they had achieved a net gain of less than 33,000 cars. And the orders placed this year have totaled only 12,814.

"The net result is we are falling short of our expansion goal for defense mobilization; and as time goes on we won't even have enough for our commercial needs."

The D.T.A. Administrator noted that last November carrier spokesmen "reaffirmed" their purpose of making additions and replacements at the rate of 10,000 cars a month. Since that time orders have been "disappointing."

(William T. Faricy, president of the Association of American Railroads, endorsed the railroad car building program again on June 15, when he was on the witness stand in the Ex Parte 175 case. Mr. Faricy said: "This industry will not be in the shape it ought to be until it has 1,850,000 freight cars.")

Mr. Knudson's remarks on freight cars came after he had praised the carriers for their "great strides" in improving motive power, and for their efforts to modernize roadway and terminal facilities.

"I feel," he said, "that we have made real progress in laying the foundations of a strong defense transportation setup, ready for any emergency. The railroads have worked wonders since the Korean outbreak in building up their plant, in increasing their service effectiveness and in promoting operating economies."

These comments about railroad preparedness constituted the "third point" in Mr. Knudson's speech. Earlier, he commented on the need for more railroads to open "new frontiers" in Central and South America. He spoke also of "the ever-present need" to modernize and improve existing plant and equipment, and he said the exchange of ideas and technical knowledge will do much to bring this about.

B&M, New Haven Go "Independent" on Per Diem

The Association of American Railroads has been advised by the New York, New Haven & Hartford and the Boston & Maine that those roads have withdrawn from that portion of the Section 5a agreement which relates to the fixing of per diem rates.

A letter to this effect was addressed to the A.A.R. on June 10, and constituted notice of withdrawal. An item in *Railway Age* of June 22, page 13, was in error in stating that withdrawal from "the per diem agreement" would be effective with increase of the freight car per diem rate from $2 to $2.40.

The Section 5a (Bulwinkle Act) agreement, approved by the I.C.C. in March 1950, provides that each railroad subscriber has the "free and unrestrained right to take independent action."

In addition to the section on per diem rates, from which the New Haven and B&M have withdrawn, the 5a agreement also covers demurrage charges, mileage allowances and storage charges.

Rates & Fares

Suburban Fare Increases Granted Illinois Central

Fare increases averaging 25 per cent were granted to the Illinois Central, for application to its Chicago area electrified suburban service, by the Illinois Commerce Commission, effective June 27.

The IC originally asked for a 45 per cent "across the board" increase in a petition filed August 1, 1952. Increases granted by the commission were: (1) One-way fares increased 33-1/3 per cent; (2) round-trip fares (180 per cent of the one-way fares) eliminated; (3) 10- and 25-ride unrestricted bearer tickets increased on sliding scale related to one-way fare and mileage traveled; (4) 12-ride weekly commutation tickets increased a uniform 75 cents; (5) restricted monthly commutation tickets increased a uniform $2.70; (6) unrestricted monthly commutation tickets increased a uniform $3; and (7) minimum fare increased from 15 to 22 cents.

Safety

Rear-End Crashes Distress The D.T.A. Administrator

"There are some dark blemishes on our railroad safety canvas which need to be vigorously rubbed out," James K. Knudson, Defense Transport Administrator, declared in a speech last week at Orlando, Fla.

Mr. Knudson was referring to "collisions between trains, in particular the rear-end collisions." He said this is one type of rail accident "that can and must be eliminated entirely." Railroad management and labor must realize that the burden of responsibi-

lity rests squarely on their shoulders to seek the complete elimination of rear-end crashes, he said.

The D.T.A. administrator said "sincere tribute" is due the Association of American Railroads, the roads themselves and the Interstate Commerce Commission staff for an era of fine safety work. But, he added, there is still much to be done.

Since July 1951, the commission has investigated 13 rear-end collisions in which 578 persons were injured and 30 killed, Mr. Knudson said.

"In nine of the 13 crashes, collisions occurred notwithstanding the use in good operation of modern automatic block signal devices by the railroads involved. The record shows that, tragically, these signal devices were disregarded or only partially heeded until too late.

"The factor of speed in excess of operating regulations was distinctly a contributory factor to both the number and seriousness of rear-end collisions," he continued.

"In a recent check of speed recorder tapes and dispatchers' records, it was found that on a particular stretch of road, more than 500 passenger trains exceeded a speed of 90 miles per hour over distances varying from 3 to 42 miles, with one case of a train operating at a speed of 108 miles an hour for 10 miles, and another in which a train sped along at 99 miles per hour for 42 miles. And these speeds in the face of the maximum authorized speed limit of 79 miles per hour!

"How imperative it is these days for both rail management and rail labor to hold the line on speed in the interest of the public safety," Mr. Knudson declared.

To eliminate rear-end collisions, Mr. Knudson called for these steps: Installation of modern signalling devices and improvement in safety equipment; increased use of radio and inductive communication systems in railroad operation; reexamination of operating rules and safety techniques, and resolute insistence by management and labor that everyone adhere rigidly to safety regulations.

People in the News

Murrow Wins G. M. Essay Prize

A.A.R. competitive transport research director likens highway problem to "mathematical equation," with many "unknown factors"; suggests truly objective analysis

Lacey V. Murrow, director of Competitive Transportation Research, Association of American Railroads, was awarded a $10,000 second prize in the "Better Highways" contest sponsored by General Motors Corporation. Mr. Murrow's prize-winning essay contained suggestions on "How to Plan and Pay for the Safe and Adequate Highways We Need."

It would seem, Mr. Murrow argued, that the time has arrived to re-establish the basic American principle of fair treatment for all forms of transportation. Highway, rail, water and air transport are so interrelated that "the deficiencies of one cannot be permanently corrected without giving some consideration to the problems of the others."

Mr. Murrow likened the highway problem to a "highly involved mathematical equation" in which many factors are known, but many others are not. Among the "known" facts are these: State and local governments have top engineering talent available, the construction industry is capable and willing, materials are available and investment funds are plentiful. The Bureau of Public Roads has an excellent reputation covering 30 years of cooperation with the 48 states.

Unknown or questionable factors in the highway equation, Mr. Murrow said, are such items as highway user taxes, size and weight restrictions on commercial vehicles, and the problem of safety.

Reviewing these "known" and "unknown" factors led Mr. Murrow to several recommendations. He urged that the Bureau of Public Roads be retained in its present role, free from political interference and with added funds for research and development.

He proposed that efforts be made to interest "one or more of the illustrious philanthropic foundations" in undertaking "a truly complete and objective analysis" of the highway problem. This, he said, would fill gaps which now exist in basic data. The analysis would cover three broad fields—regulation, taxes and maximum design criteria.

Mr. Murrow went on to suggest that regional committees be established to consider highway needs, that more lead time be granted when highway expenditures are authorized, that efforts be made to obtain uniform traffic laws and that laws be carefully enforced.

The prize-winning essay was written while Mr. Murrow was on leave from the A.A.R., on active duty as a brigadier general with the Air Force.

Robert Moses, New York City Commissioner of Parks, won the $25,000 first prize in the G.M. contest.

D. L. Williams Named Georgia Ports Director

D. Leon Williams has been named director of the Georgia Ports Authority, owners and operators of the Savannah State Docks and Warehouses. Mr. Williams, who will maintain offices in Savannah and Atlanta, where he was formerly the authority's director of commerce, succeeds Henry W. Sweet.

Figures of the Week

Freight Car Loadings

Loadings of revenue freight in the week ended June 20 totaled 812,578 cars, the Association of American Railroads announced on June 25. This was an increase of 15,153 cars, or 1.9 per cent, compared with the previous week; an increase of 168,609 cars, or 26.2 per cent, compared with the corresponding week last year; and a decrease of 20,364 cars, or 2.4 per cent, compared with the equivalent 1951 week.

Loadings of revenue freight for the week ended June 13 totaled 797,425 cars; the summary for that week, compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, June 13

District	1953	1952	1951
Eastern	135,080	110,285	144,753
Allegheny	162,443	102,940	170,994
Pocahontas	58,271	49,741	65,397
Southern	124,280	119,240	126,934
Northwestern	130,289	69,039	137,265
Central Western	125,384	120,276	122,770
Southwestern	61,678	59,521	58,770
Total Western Districts	317,351	248,836	318,805
Total All Roads	797,425	631,042	826,883
Commodities:			
Grain and grain products	53,420	51,740	46,114
Livestock	7,438	6,878	6,815
Coal	131,817	113,691	148,119
Coke	13,999	4,585	16,954
Forest products	46,204	44,625	49,420
Ore	93,247	18,164	90,014
Merchandise l.c.l.	66,667	69,038	74,834
Miscellaneous	384,633	322,321	394,613
June 13	797,425	631,042	826,883
June 6	775,489	684,247	813,326
May 30	786,755	696,860	744,655
May 23	769,618	761,705	811,799
May 16	779,805	754,448	809,475
Cumulative total 24 weeks	17,297,598	17,245,476	18,263,756

In Canada.—Carloadings for the seven-day period ended June 14 totaled 83,984 cars, compared with 74,476 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
June 14, 1953	83,984	32,881
June 14, 1952	80,771	31,935
Cumulative Totals		
June 14, 1953	1,743,316	750,352
June 14, 1952	1,821,018	801,130

Organizations

47 Complete Third National RR Police Academy Course

A record class of 47 representatives of railroad police departments throughout the country completed the third National Railroad Police Academy course held in Chicago June 8-19. Operated under auspices of the Protective Section, Association of American Railroads, the academy is a professional school for advanced study designed to assist railroad police departments to maintain their recognized status as a professional group of trained policemen.

Following suggestions advanced by students in last year's class, this year's course made extensive use of project-type training programs with actual on-the-scene investigations, supported by lectures and text book study. Some 27 trained instructors — including representatives from several railroads, the Federal Bureau of Investigation, the Chicago Police Department, the Milwaukee City Police Department, the Cook County Fire Inspection Bureau, and the American Red Cross—cooperated in presenting the course.

The **Eastern Car Foreman's Association's** annual golf outing will be held at Race Brook Country Club, Orange, Conn., July 16.

Fifteen students of I.C.C. law practice and procedure have been presented diplomas from Bradley University's College of Commerce. They represent the first to graduate from the study course sponsored by the **Transportation Club of Peoria** (Ill.) in cooperation with the university. The course was conducted over a three-year period. The students met weekly for 2½-hour sessions.

The **American Railway Car Institute** will be located at 19 East 47th street, New York, after July 1.

The following officers of the **Railway Business Women's Association of Cincinnati** were installed at a dinner meeting June 9: Loretta Dusing, Chesapeake & Ohio, president (re-elected); Olive Ryan, New York Central, vice-president; Gertrude Schwenninger, Cincinnati Union Terminal, corresponding secretary; Elizabeth Gerrard, Railroad Perishable Inspection Agency, recording secretary; and Jean Nolan, Baltimore & Ohio, treasurer.

The new Washington, D.C., chapter of **Delta Nu Alpha Transportation Fraternity** will meet in the conference room of the Southern building in Washington on the night of June 30. Arthur M. Bastress, national president of the fraternity, will present a charter to the new chapter.

Equipment & Supplies

PASSENGER CARS

Canadian Pacific Orders 155 Transcontinental Cars

"To provide a rapidly expanding nation with the most modern and dependable railway equipment," the Canadian Pacific has ordered 155 all-stainless steel cars from the Budd Company. Included in the large order are 36 dome cars, which, when placed in service, will usher in a new era in Canadian transcontinental travel. They will be the first dome cars to operate in Canada, and the all-stainless steel streamliners which the new cars will make up will be the first to serve that country.

The complete order, which represents an estimated expenditure of $38 million, calls for 18 dome-lounge-observation cars; 18 dome-buffet-observation cars; 18 dining cars; 30 day coaches, with reclining seats and full-length leg rests; and 71 sleeping cars, with varying interior arrangements to provide all types of standard open-section and enclosed sleeping space.

All the cars—the first of which are scheduled to be in service in the spring of 1954—are intended for use on CPR transcontinental trains.

They will be equipped with disc brakes, a development of the Budd Company, which transfers braking from the wheel to a disc mounted on the inner surface of each wheel. The cars will be air-conditioned, with wide picture windows, comfortable seats, spacious lounges and the most popular types of sleeping accommodations.

One of the larger orders placed with the Budd Company in recent years, the CPR order is the first received by the firm from Canada.

Supply Trade

Hamilton Corey, branch manager of the **Graybar Electric Company** at Charlotte, N.C., has been appointed district sales manager at Atlanta, Ga.

A. W. Fisher has retired as consultant in engineering for the **Union Switch & Signal Division** of **Westinghouse Air Brake Company,** but will continue to serve in an advisory capacity.

Lowell R. Burch has resigned as chairman of the board of the **New York Air Brake Company,** but will continue as chairman of the executive committee and as a director. **Dr. Lewis K. Sillcox,** vice-chairman of the board, has been elected honorary vice-chairman, and in addition will continue as a director. **Charles T. Zaoral,** vice-president in charge of operations, and a director, has been elected a member of the executive committee.

S. L. Williams, eastern manager of the Air Brake division of Westinghouse Air Brake Company, at New York, has been appointed assistant to vice-president and general manager at Wilmerding, Pa. Mr. Williams will act as coordinator between engineering and sales departments, and will concentrate on developing and expanding the Air Brake division's line of products and increasing the scope of market coverage.

Emil P. Kondra, engineering and sales assistant of the **National Brake Company,** New York, has been appointed assistant vice-president in charge of sales promotion.

W. T. Colman has been appointed district manager of the Washington, D.C., office of **Baldwin-Lima-Hamilton Corporation,** effective July 15. Mr. Colman was formerly in the sales department of Baldwin's Lima (Ohio)

(*Continued on page* 59)

R. M. Beswick, who has been appointed southeastern district manager of the Air Brake division of Westinghouse Air Brake Company, at Washington, D. C. Assistant manager since August 1951, he succeeds V. B. Emrick, retired.

WORRIED ABOUT HEAVY OVERHEAD?

If you're wrestling with heavy costs on Diesel locomotive upkeep, it will pay you to look into Electro-Motive's Unit Exchange plan for major components. You can save a big investment in facilities—and reduce parts inventories—by exchanging work-worn units for Factory Rebuilds that carry the same warranty as new.

ELECTRO-MOTIVE'S UNIT EXCHANGE
gives you better rebuilds—faster—at lower cost

ELECTRO-MOTIVE DIVISION
GENERAL MOTORS

GENERAL MOTORS LOCOMOTIVES

La Grange, Illinois • Home of the Diesel Locomotive • In Canada: GENERAL MOTORS DIESEL, LTD., London, Ontario

Refrigerator car, owned and operated by Wilson Car Lines, who cooperated with ASF by keeping records of service duration and car mileage. Beam shown above is one of the four removed from this car.

20% above requirements—on the AAR Static Test

Only .056" deflection at 18,000 lbs., compared to permissible .070' deflection. Two of these beams were then loaded to the breaking point—which proved to be almost *four times* their rated capacity!

38% above requirements—on the AAR Fatigue Test

The two remaining beams withstood an average of 1,032,181 loadings—well over a quarter of a million more than required for AAR certification. (Each loading 18,000 lbs., applied at the rate of 50 per minute.)

Unretouched close-up of ASF Unit Beam—after 34 months and 119,503 miles under a Wilson Car Lines Refrigerator Car. Measurements showed that alignment and metal thickness were closely comparable to those of a new cast-steel beam.

You'd think this ASF Cast-Steel Unit Beam was brand new instead of three years old . . . because test results proved

After 119,503 miles... still above AAR specifications!

Some just-completed tests of ASF Cast-Steel Unit Brake Beams will interest every railroad looking for ways to cut maintenance costs.

The beam shown here is one of a set that has traveled 119,503 miles during 34 months —on a Wilson Car Lines Refrigerator Car. Refrigerator service was deliberately chosen for the test because brine-induced corrosion makes it extra tough on running gear.

Before testing, the four beams were shot-blasted to remove rust and scale. Measurement showed practically no loss of dimension or misalignment—and extremely light wear, considering length of service. For example, unit extensions were only about 1/16" undersize! And, *here are the results of static and fatigue tests—made according to AAR specifications:*

	STATIC TEST		FATIGUE TEST	
	Deflection at 18,000 lbs.	Set, after 30,000 lbs.	Maximum load before fracture	18,000 lb. loadings
AAR Requirements	.070"	.010"	(None)	750,000
Average performance of ASF Unit Beams in service 3 years	.056"	.0012"	68,950 lbs.	1,032,181

In short, still far above standards! Find out more about the beam that *maintains* its strength and shape during *prolonged service . . . and reduces your maintenance and replacement costs.* Write us, or ask your nearest ASF Representative for more information!

Like modern side frames that replaced arch bar trucks . . . the MODERN BRAKE BEAM is the

ASF One-Piece Cast-Steel UNIT BRAKE BEAM

AMERICAN STEEL FOUNDRIES

410 North Michigan Avenue, Chicago 11, Illinois

Look for this MINT ◯ MARK on the running gear you specify

Canadian Sales: International Equipment Co., Ltd., Montreal

Southern Installs G-E Sodium Vapor Lamps to Speed Hump-Retarding at Norris Yard

The Southern Railway System has installed G-E sodium-vapor lamps to speed car identification and add extra safety to night-time hump-retarder operations at its modern Norris Yard in Birmingham, Ala.

Mounted near ground level, these G-E sodium-vapor lamps shower soft light with minimum glare on passing cars, so clerks can record car numbers swiftly and accurately. At the crest of the hump, pin-pullers work with top visibility right where it counts—down low and in-between the cars. This permits fast, safer switching to any of Norris' 56 different classification tracks.

For excellent visibility, night in and night out—even under foggy weather conditions—specify G-E sodium-vapor lamps for your humping and retarding operations.

For further details on modern railroad floodlighting, contact your nearest G-E apparatus sales representative. General Electric Company, Schenectady 5, New York.

152-48A

You can put your confidence in—

GENERAL ELECTRIC

puzzled about handling costs?

then consult **BROWNHOIST**

Railroads, steel mills, mines, docks and large manufacturing plants can cut costs and speed materials handling with BROWNHOIST equipment. BROWNHOIST builds boat unloaders, fast plants, traveling bridge cranes, storage bridges, shipyard cranes, car dumpers, locomotive cranes and related machinery to handle bulk materials in large quantities rapidly and efficiently. The traveling ore bridge shown here, for example, can unload and stockpile approximately 600 tons of iron ore per hour.

BROWNHOIST equipment is built in capacities to meet virtually every bulk materials handling requirement. If you want to save production time and money, it will pay you to consult your nearest BROWNHOIST representative or write us today for complete information.

This Traveling Ore Bridge helped one large manufacturer cut the cost of unloading shipments of ore from Great Lakes' vessels. It has a span of 234 ft., a raisable apron extending 88 ft. from the center of the pier leg and a fixed cantilever 55 ft. on the shear end. It is equipped with Brown patent ore buckets.

170

BROWNHOIST
builds better cranes

CLAMSHELL BUCKET

250 TON WRECKING CRANE

COAL-ORE BRIDGE

CAR DUMPER

INDUSTRIAL BROWNHOIST CORPORATION • BAY CITY, MICHIGAN • DISTRICT OFFICES: New York, Philadelphia, Cleveland, San Francisco, Chicago; Montreal, Quebec • AGENCIES: Detroit, Birmingham, Houston, Los Angeles.

Outstanding benefits of the

Exide-Ironclad

for car-lighting and air-conditioning

Exide-Ironclad—the battery that offers a uniform flow of dependable power to maintain bright, steady lights and comfortable air-conditioned cars.

Exide-Ironclad batteries assure:

AMPLE POWER for entire car-lighting and air-conditioning loads . . . uniform voltage at proper values throughout run.

STEADY LIGHT AND COOL CARS even during long stops.

UNINTERRUPTED SERVICE—can be changed or recharged in yard—withstand vibration, shock, service variations and temperature differences.

LOW OPERATING, MAINTENANCE and DEPRECIATION COSTS.

Exide-Ironclad batteries meet all requirements of car design and electrical loads.

DEPENDABLE POWER

Visit Exide at the A.A.R. Railway Supply Manufacturers Association Show Atlantic City—June 22-27 Space K-1

YOUR BEST BATTERY BUY AT ANY PRICE

Here's the Inside Story of the EXIDE-IRONCLAD Battery

Inside . . . where it counts most . . . Exide-Ironclad is entirely different from any other battery. It's made that way by the exclusive IRONCLAD slotted tube construction . . . a principle that provides direct operating-hour savings for you.

POSITIVE PLATE SPINES cast with the heavy top bars are of SILVIUM, which resists corrosion . . . contributing to longer battery life.

SLOTTED TUBES retain active material in contact with spines, yet permit the electrolyte to penetrate throughout the active material.

POLYETHYLENE TUBE SEALER. This acid-proof plastic sealer fits snugly into the bottom of positive plate tubes, sealing in the active material for a longer working life.

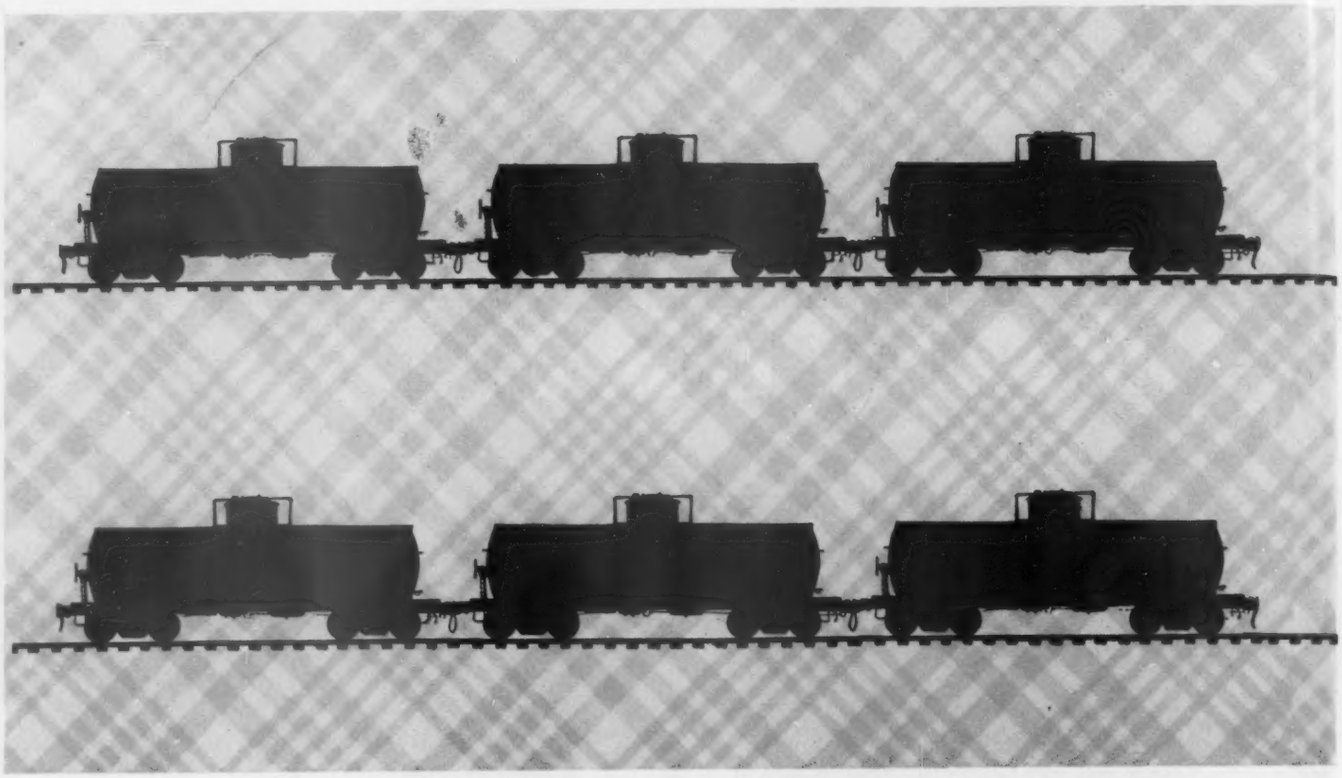
1888 . . . DEPENDABLE BATTERIES FOR 65 YEARS . . . 1953

THE ELECTRIC STORAGE BATTERY CO., Phila. 2 • *Exide Batteries of Canada, Limited, Toronto*

HOMOGENEOUS SEALING COMPOUND resists shock, without cracking, at high or low temperatures. Forms a permanent seal between container and cover.

NEW QUARTER-TURN PLASTIC VENT PLUGS. Made of unbreakable polyethylene. Can be quickly and easily removed to add water.

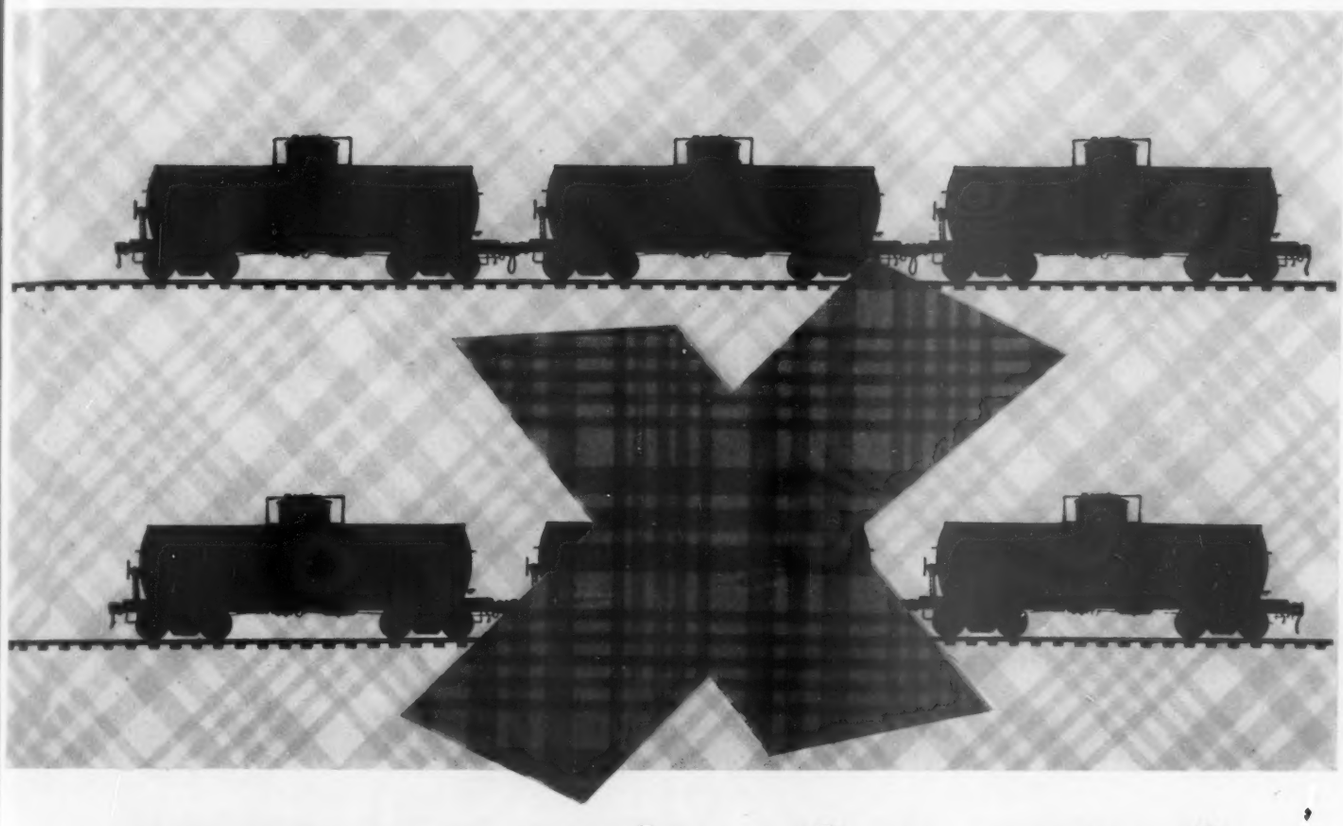
Exide-Ironclad batteries in a wide variety of types and sizes are also available for diesel starting and for battery-electric trucks.



Thrifty Baldwins' fuel economy every twelve tank cars of fuel oil . . .

Six Reasons Why Baldwins Are Thrifty:

1. Baldwins give as much as 8% more miles per gallon of fuel.
2. They consume up to 33⅓% less lube oil.
3. 5 to 15% fewer diesel engine and electrical parts decrease wear, replacements, and maintenance costs, and increase availability.
4. The Baldwin system of dynamic braking has braking capacity which exceeds that found in the majority of today's locomotives—in some cases by as much as 50%—meaning less wheel and brake shoe wear, better control.
5. They have the weight and controls that can increase hauling capacity up to 3 additional freight cars in the tough assignments.
6. Standardizing on Baldwin renewal parts ensures the finer quality and service for trouble-free performance and peak availability.



can mean a saving of one out of

. . .

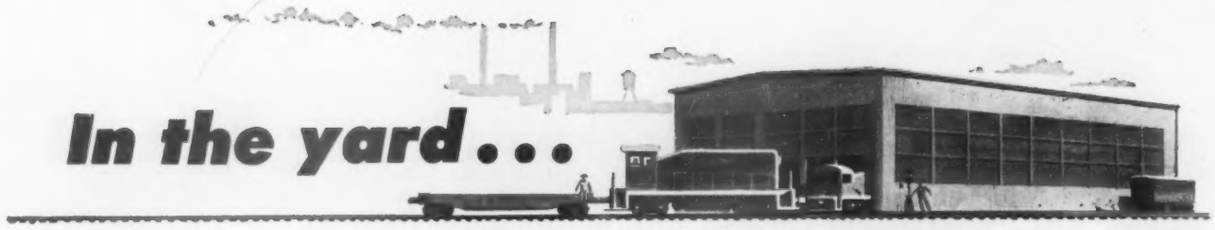
Fuel economy is inherent in the Baldwin 4-cycle, medium speed diesel engine. Block tests and many operating records show fuel consumption lower by as much as 8%. If you would like to see the full story of the thriftiness of Baldwin-Westinghouse Diesel-Electric locomotives, please write us on your railroad's letterhead.

BALDWIN BLH LIMA-HAMILTON WESTINGHOUSE W

BALDWIN-Westinghouse

DIESEL-ELECTRIC LOCOMOTIVES

.... they're thrifty



In the yard...

or on the road...

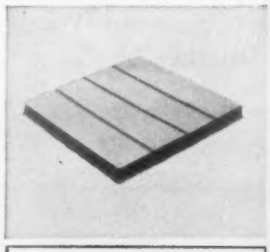
Johns-Manville men and materials help you improve passenger comfort and cut maintenance costs

Shown below are four—of many—Johns-Manville products that have *proved* their ability to cut costs and add to passenger comfort in thousands of railroad installations across the country.

Such products do their job well . . . provide the greatest economy in service . . . and last through the years, because they were designed, engineered and manufactured with the highest standards of quality as a basic objective.

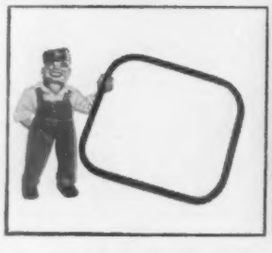
Your Johns-Manville representative will be glad to help you decide which of these and other Johns-Manville products can be best used to help reduce your costs and increase the comfort of your passengers.

J-M STONEFELT® INSULATION—Here is an efficient, fireproof mineral fibre insulation especially designed for refrigerator and passenger car service. Stonefelt provides low thermal conductivity, good sound absorption and moisture-resistance. Effectively helps keep car temperatures uniform regardless of the weather outside.



J-M THERMO-WRAP® PIPE INSULATION—This efficient, lace-on type insulation gives maximum protection to steam heating lines throughout the length of the train from head end to the last car. It is easy to install—fits tight and stays tight—withstands rain, sleet, snow and the impact of flying ballast. Made of selected asbestos fibre, and protected with a tough Neoprene coating.

J-M DIESEL LOCOMOTIVE PACKINGS—This is one of a group of new packings especially made for diesel locomotives. The gasket shown is designed for hand-hole cover plate service. It is a moulded packing unaffected by gas or oil. It seals tightly, conforms readily to warped or distorted plates. Johns-Manville Packings provide longer, more economical service.



J-M TRANSITE® PRESSURE PIPE—This asbestos-cement pipe cuts water line costs because it is highly corrosion resistant. Flexible joints enable it to withstand an unusual amount of vibration. Its high water-carrying capacity keeps down pumping costs and its light weight and easily assembled joints make for economical installation.

For further information on these and other Johns-Manville products, get in touch with your J-M Representative, or write Johns-Manville, Box 60, New York 16, N. Y.

JOHNS-MANVILLE JM PRODUCTS **Johns-Manville** 95 YEARS OF SERVICE TO TRANSPORTATION

To File Tear Here

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF APRIL AND FOUR MONTHS OF CALENDAR YEAR 1953

Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1953	Total (inc. misc.) 1952	Operating Expenses: Maint. Way and Structures: Total 1953	Total 1952	Deprec. and Retirements	Maint. Equipment: Total 1953	Total 1952	Deprec. and Retirements	Traffic	Transportation	Total 1953	Total 1952	Operating ratio 1953	Operating ratio 1952	Net from railway operation	Railway tax accruals	Net railway operating income 1953	Net railway operating income 1952
Akron, Canton & Youngstown	April	171	544	....	559	437	66	72	6	49	52	15	41	140	329	324	59.0	74.1	229	103	99	57
	4 mos.	171	2,075	....	2,132	1,861	278	283	23	202	226	61	157	562	1,330	1,331	62.4	71.5	802	357	340	236
Atchison, Topeka & Santa Fe Syst.	April	13,094	44,778	3,684	52,684	47,956	8,050	7,418	662	9,678	9,719	1,699	1,268	14,719	35,685	35,551	67.7	74.1	16,999	9,773	7,063	5,101
	4 mos.	13,094	172,246	15,667	204,919	191,360	29,470	26,341	2,667	35,530	36,226	6,743	4,664	60,197	138,109	136,546	67.4	71.4	66,809	38,520	28,001	22,581
Atlanta & St. Andrews Bay	April	82	314	1	324	286	30	31	3	21	28	4	8	69	148	146	45.8	51.2	176	96	49	43
	4 mos.	82	1,289	5	1,325	1,245	118	142	10	88	93	17	34	274	594	586	44.9	47.1	730	399	208	206
Atlanta & West Point	April	93	289	37	376	386	48	58	5	71	60	13	17	152	313	304	83.1	78.8	53	27	22	30
	4 mos.	93	1,159	163	1,523	1,585	199	195	24	280	241	51	64	619	1,257	1,211	82.5	76.4	267	125	87	119
Western of Alabama	April	133	316	35	396	415	65	50	7	75	70	16	17	145	327	297	82.5	71.5	69	39	33	52
	4 mos.	133	1,286	157	1,614	1,554	245	195	28	281	266	62	66	558	1,241	1,177	76.9	75.8	373	207	174	141
Atlantic & Danville	April	205	192	....	194	170	40	40	2	15	11	5	13	57	136	127	70.4	74.9	57	11	20	13
	4 mos.	205	690	....	700	669	133	155	8	60	44	19	48	210	499	498	71.3	74.5	201	43	62	55
Atlantic Coast Line	April	5,379	12,657	1,922	15,760	15,705	2,508	2,368	171	3,803	2,719	544	376	5,946	13,276	11,098	84.2	70.7	2,484	1,150	824	1,566
	4 mos.	5,379	49,038	8,830	62,761	63,613	9,782	8,856	651	13,908	10,620	2,172	1,549	22,111	50,000	44,075	79.7	69.3	12,760	6,800	4,020	5,722
Charleston & Western Carolina	April	343	626	1	644	597	151	124	4	92	107	42	17	173	453	441	70.2	73.9	192	85	102	79
	4 mos.	343	2,352	5	2,423	2,302	574	533	15	405	427	170	67	676	1,780	1,765	73.5	76.7	643	300	346	272
Baltimore & Ohio	April	6,186	34,332	1,865	38,687	35,667	5,223	4,686	508	8,234	7,343	1,018	906	14,321	30,333	28,786	78.4	80.7	8,354	3,166	4,000	3,369
	4 mos.	6,186	131,427	7,317	148,274	147,923	19,164	19,294	2,298	32,305	31,854	4,037	3,601	56,824	118,198	119,612	79.7	80.9	30,076	10,779	14,666	14,344
Staten Island Rapid Transit	April	29	267	44	316	306	63	53	16	35	34	2	2	143	276	261	87.4	85.2	40	36	—19	—21
	4 mos.	29	957	208	1,181	1,229	260	203	48	130	149	8	6	611	1,137	1,059	96.3	86.2	44	146	—195	—63
Bangor & Aroostook	April	602	1,303	30	1,376	1,332	325	250	16	222	246	91	20	324	954	887	69.3	66.6	422	194	219	225
	4 mos.	602	5,788	138	6,107	6,089	1,300	970	66	967	977	340	79	1,414	4,030	3,852	66.0	63.3	2,076	988	1,038	989
Bessemer & Lake Erie	April	213	2,702	....	2,724	2,414	203	216	20	590	682	136	19	468	1,368	1,500	50.2	62.1	1,356	856	701	391
	4 mos.	213	7,476	1	7,560	6,687	757	798	83	3,079	2,556	534	84	1,647	5,931	5,588	78.5	83.6	3,408	1,055	1,196	764
Boston & Maine	April	1,679	5,956	848	7,624	7,226	1,315	1,351	164	1,184	1,162	179	121	3,050	6,002	6,053	78.7	83.8	1,622	744	472	317
	4 mos.	1,679	23,061	3,694	30,152	29,351	5,226	5,349	678	4,662	4,538	719	451	12,755	24,496	24,563	81.2	83.7	5,656	2,509	1,564	1,153
Cambria & Indiana	April	35	151	....	151	124	16	18	1	101	94	22	....	22	145	139	96.4	111.7	5	65	76	39
	4 mos.	35	613	....	613	612	71	65	3	392	347	89	1	86	574	548	93.7	89.5	39	249	305	212
Canadian Pacific Lines in Maine	April	234	507	47	586	630	91	140	5	140	80	17	8	209	466	448	79.6	71.2	120	27	58	70
	4 mos.	234	2,962	208	3,285	3,271	375	455	20	692	481	67	32	1,172	2,331	2,161	71.1	66.1	954	115	628	608
Canadian Pacific Lines in Vermont	April	90	210	12	241	229	46	71	4	38	35	....	7	152	253	234	105.1	102.5	—12	12	—76	—71
	4 mos.	90	776	54	910	914	205	257	16	147	136	1	27	496	910	925	100.0	101.3	..	48	—255	—281
Central of Georgia	April	1,786	3,428	205	3,937	3,813	572	629	47	629	623	114	146	1,471	3,046	3,136	77.4	82.3	891	376	388	246
	4 mos.	1,786	13,193	838	15,282	14,982	2,425	2,411	285	2,385	2,409	457	540	5,702	11,931	12,335	78.1	82.3	3,352	1,494	1,397	949
Central of New Jersey	April	617	4,458	442	5,264	5,152	718	742	87	1,020	1,053	173	83	2,154	4,228	4,355	80.3	84.5	1,036	487	392	194
	4 mos.	617	17,530	1,773	20,732	20,924	2,730	2,615	346	4,317	4,105	665	320	8,676	16,934	17,160	81.7	82.0	3,798	1,892	1,248	1,275
Central Vermont	April	422	897	53	1,017	857	229	172	16	161	164	12	16	384	837	801	82.3	93.5	180	44	52	—49
	4 mos.	422	3,275	230	3,773	3,664	709	651	65	612	668	50	64	1,498	3,057	3,253	81.0	88.8	716	167	203	7
Chesapeake & Ohio	April	5,116	26,955	775	29,109	29,202	4,082	4,272	360	5,535	6,205	1,482	655	8,908	20,502	21,769	70.4	74.5	8,606	3,801	4,918	3,891
	4 mos.	5,116	102,479	2,625	109,865	120,548	15,743	16,599	1,416	21,884	25,065	5,851	2,732	35,195	80,652	88,370	73.4	73.3	29,213	13,336	17,207	17,246
Chicago & Eastern Illinois	April	868	2,513	238	3,082	2,647	374	387	26	537	426	125	133	1,066	2,295	2,114	74.5	79.9	787	255	364	254
	4 mos.	868	9,729	1,017	12,049	11,455	1,512	1,392	121	2,040	1,728	494	519	4,228	9,093	8,510	75.5	74.3	2,956	972	1,428	1,384
Chicago & Illinois Midland	April	130	836	....	851	543	87	95	18	155	182	23	31	222	543	544	63.8	100.1	308	156	117	—50
	4 mos.	130	2,787	1	2,851	2,503	335	353	34	613	761	93	129	875	2,139	2,228	75.0	89.0	712	368	249	3
Chicago & North Western	April	7,874	13,463	1,596	16,863	15,175	3,011	2,881	336	3,194	3,383	771	398	7,319	14,755	14,903	87.5	98.2	2,108	1,069	688	—996
	4 mos.	7,874	50,050	6,816	63,907	62,875	10,338	10,220	1,300	12,573	13,077	3,096	1,459	29,738	57,440	59,312	89.9	94.3	6,466	4,216	674	—1,937
Chicago, Burlington & Quincy	April	8,867	18,605	1,409	22,385	19,380	3,631	3,708	372	3,448	3,064	696	551	7,659	16,101	15,253	71.9	78.7	6,284	3,490	2,421	1,410
	4 mos.	8,867	74,065	5,947	89,264	81,927	11,613	10,792	1,486	13,207	13,507	2,765	2,118	31,619	61,854	59,537	69.3	72.7	27,410	14,904	11,088	8,494
Chicago Great Western	April	1,468	2,555	12	2,750	2,780	429	501	6	303	344	119	109	867	1,789	1,996	65.1	71.8	961	318	432	261
	4 mos.	1,468	6,832	23	7,365	11,580	1,261	1,852	136	1,006	1,630	477	441	2,419	5,382	8,065	73.1	69.6	1,982	798	1,000	1,214
Chicago, Indianapolis & Louisville	April	541	1,722	62	1,902	1,725	339	320	19	291	279	70	88	635	1,446	1,409	76.0	81.7	456	170	182	122
	4 mos.	541	6,654	248	7,392	7,117	1,352	1,272	81	1,078	1,020	277	349	2,489	5,657	5,508	76.5	77.5	1,735	650	717	582
Chicago, Milw., St. Paul & Pacific	April	10,670	17,769	1,264	21,365	20,455	3,669	3,425	375	4,769	4,660	855	480	8,321	18,275	18,288	85.5	89.4	3,090	1,494	952	537
	4 mos.	10,670	70,742	5,106	84,327	84,485	11,409	11,757	1,485	18,066	18,751	3,436	1,944	33,832	69,279	73,115	82.2	86.5	15,048	7,239	5,114	3,380
Chicago, Rock Island & Pacific	April	7,914	14,185	1,464	17,252	16,832	2,198	2,159	251	2,676	2,829	554	494	5,754	11,963	12,480	69.3	74.1	5,289	2,286	2,242	1,795
	4 mos.	7,914	58,558	6,193	70,791	69,036	7,861	8,114	987	10,776	11,609	2,190	1,963	24,051	48,038	50,887	67.9	73.7	22,754	10,048	9,744	7,353
Chicago, St. Paul, Minn. & Omaha	April	1,617	2,320	141	2,678	2,352	506	484	51	448	444	89	71	1,344	2,499	2,412	93.3	102.5	179	180	—181	—437
	4 mos.	1,617	9,212	649	10,786	10,688	1,695	1,645	187	1,717	1,759	359	273	5,714	9,915	10,008	91.9	93.6	871	718	—738	—955
Clinchfield	April	317	2,084	1	2,092	1,849	387	308	20	351	323	93	46	401	1,225	1,128	58.5	61.0	868	220	718	635
	4 mos.	317	8,302	3	8,339	8,065	1,424	1,094	85	1,445	1,309	357	181	1,636	4,844	4,567	58.1	56.6	3,495	881	2,991	3,124

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF APRIL AND FOUR MONTHS OF CALENDAR YEAR 1953

Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1953	Total (inc. misc.) 1952	Operating Expenses: Maint. Way and Structures: Total 1953	Total 1952	Deprec. and Retirements	Maint. Equipment: Total 1953	Total 1952	Deprec. and Retirements	Traffic	Transportation	Total 1953	Total 1952	Operating ratio 1953	Operating ratio 1952	Net from railway operation	Railway tax accruals	Net railway operating income 1953	Net railway operating income 1952
Colorado & Southern	April	729	1,177	61	1,365	1,292	150	131	19	186	205	44	28	435	855	884	62.6	68.5	510	253	247	157
	4 mos.	733	4,503	267	5,269	5,143	544	531	88	751	854	138	120	1,798	3,441	3,627	65.3	70.5	1,828	974	797	555
Ft. Worth & Denver	April	1,038	1,572	118	1,847	1,926	254	325	36	246	245	37	54	623	1,271	1,428	68.8	74.1	576	222	272	218
	4 mos.	1,038	6,838	488	7,969	8,271	1,113	1,122	169	1,085	967	128	225	2,670	5,477	5,641	68.7	68.2	2,491	988	1,110	1,181
Colorado & Wyoming	April	40	193	....	313	216	18	34	2	41	36	11	1	113	186	186	59.3	86.1	127	76	49	22
	4 mos.	40	753	....	1,235	1,076	71	128	8	140	146	44	6	443	704	769	57.0	71.4	531	309	216	113
Columbus & Greenville	April	168	168	....	176	152	40	36	4	30	28	6	4	47	141	136	80.0	89.7	35	29	12	1
	4 mos.	168	687	....	714	664	137	137	15	106	121	25	17	187	520	550	72.8	82.7	195	138	81	38
Delaware & Hudson	April	793	4,144	132	4,442	4,704	803	731	95	938	922	95	88	1,557	3,586	3,704	80.7	78.7	856	203	668	602
	4 mos.	793	16,699	622	17,932	19,510	2,828	2,385	286	3,385	4,017	577	322	6,421	13,787	15,032	76.9	77.0	4,146	1,445	2,887	2,390
Delaware, Lackawanna & Western	April	962	6,220	788	7,710	7,666	896	891	213	1,312	1,476	303	178	3,170	5,818	6,110	75.5	79.7	1,892	950	905	729
	4 mos.	962	23,460	3,170	29,551	30,730	3,240	3,164	624	5,186	5,770	1,210	692	12,838	23,049	24,249	78.0	78.9	6,502	3,254	3,205	3,138
Denver & Rio Grande Western	April	2,313	6,439	297	6,985	5,974	1,236	892	183	1,201	1,157	251	184	1,959	4,886	4,492	70.0	75.2	2,099	1,069	889	609
	4 mos.	2,323	25,496	1,180	27,569	24,946	3,110	2,950	551	4,633	4,633	983	719	8,074	17,713	17,824	64.3	71.5	9,856	5,079	4,310	3,089
Detroit & Mackinac	April	232	146	....	152	159	42	43	3	25	21	9	5	41	124	116	81.7	73.2	28	19	13	19
	4 mos.	232	618	2	644	586	167	172	11	91	78	38	19	136	455	459	70.7	78.3	189	110	101	61
Detroit & Toledo Shore Line	April	50	691	....	722	611	79	72	3	66	54	18	16	192	369	351	51.2	57.5	352	124	109	85
	4 mos.	50	2,990	....	3,126	2,754	319	298	12	256	240	70	67	822	1,521	1,465	48.7	53.2	1,604	609	525	419
Detroit, Toledo & Ironton	April	464	1,866	....	1,952	1,387	228	229	23	263	305	74	32	598	1,190	1,021	60.9	73.6	762	340	340	145
	4 mos.	464	7,624	1	8,014	6,362	909	769	108	963	1,505	293	121	3,284	5,542	4,284	69.1	67.3	2,473	1,065	1,032	866
Duluth, Missabe & Iron Range	April	567	5,362	1	6,254	4,945	586	571	64	787	689	100	9	1,973	3,501	3,288	56.0	66.5	2,753	432	2,443	1,346
	4 mos.	567	7,310	3	8,459	6,419	2,102	2,505	274	3,147	2,812	401	38	4,079	9,851	9,796	116.5	152.6	—1,392	791	—1,984	—3,897
Duluth, South Shore & Atlantic	April	553	716	4	757	659	152	129	10	142	151	21	24	221	561	555	74.1	84.2	196	69	82	40
	4 mos.	550	2,658	23	2,813	2,537	542	468	23	625	593	83	93	896	2,239	2,181	79.6	86.0	574	184	241	102
Duluth, Winnipeg & Pacific	April	175	363	1	369	406	85	85	4	73	75	2	6	197	369	381	99.9	93.7	....	28	—85	—76
	4 mos.	175	1,700	3	1,727	2,542	283	295	17	284	323	8	22	804	1,421	1,689	82.3	66.4	306	133	—87	323
Elgin, Joliet & Eastern	April	236	3,823	....	4,610	3,878	333	455	24	990	733	115	33	1,654	3,166	2,866	68.7	73.9	1,444	663	329	136
	4 mos.	236	15,500	....	18,813	17,494	1,121	1,570	102	3,769	2,881	458	137	6,776	12,428	11,997	66.1	68.6	6,385	3,186	1,564	865
Erie	April	2,237	13,757	555	15,477	13,683	1,961	1,884	235	2,176	2,471	495	352	5,970	11,135	10,986	71.9	80.3	4,342	1,860	1,824	1,171
	4 mos.	2,237	52,963	2,313	59,660	58,645	7,020	6,629	938	8,635	9,209	1,970	1,421	23,752	43,526	43,794	73.0	74.7	16,134	6,943	6,865	6,452
Florida East Coast	April	571	2,679	700	3,624	3,542	372	368	39	533	477	78	78	1,326	2,495	2,315	68.8	65.4	1,130	334	509	638
	4 mos.	571	9,947	3,457	14,561	15,122	1,467	1,449	166	2,176	2,043	310	308	5,027	9,800	9,716	67.3	64.2	4,761	1,604	2,290	2,699
Georgia Railroad	April	321	753	26	842	819	137	145	9	142	129	32	35	353	708	685	84.0	83.6	135	38	125	110
	4 mos.	321	2,871	85	3,220	3,275	509	478	34	546	503	120	138	1,324	2,666	2,600	82.8	79.4	554	148	499	591
Georgia & Florida	April	360	337	....	343	313	114	92	4	33	36	6	20	105	289	249	84.4	79.8	54	19	3	22
	4 mos.	360	1,332	....	1,350	1,152	406	332	14	151	134	23	77	397	1,093	931	80.9	80.8	257	75	57	63
Grand Trunk Western	April	952	4,993	196	5,553	4,656	767	767	52	851	927	89	77	2,371	4,251	4,061	76.6	87.2	1,302	309	699	52
	4 mos.	952	18,803	831	21,135	19,134	2,687	2,675	206	3,502	3,486	357	307	9,027	16,236	15,783	76.8	82.5	4,899	1,198	2,573	1,195
Canadian Natl. Lines in New Engl.	April	172	150	4	175	234	55	64	10	34	65	....	3	131	239	334	136.7	142.8	—64	24	—142	—180
	4 mos.	172	787	15	970	1,025	267	262	38	201	245	1	11	558	1,123	1,218	115.8	118.8	—153	96	—459	—469
Great Northern	April	8,303	19,137	947	21,666	19,854	4,128	3,688	315	3,876	3,924	715	388	7,005	16,210	15,926	74.8	80.2	5,456	2,302	2,805	2,036
	4 mos.	8,303	64,835	3,753	73,718	70,279	14,171	13,051	1,234	15,093	15,427	2,764	1,594	26,756	60,820	61,445	82.5	87.4	12,898	6,926	4,504	1,637
Green Bay & Western	April	224	379	....	384	309	78	74	4	39	44	8	21	86	238	242	62.0	78.6	146	74	51	28
	4 mos.	224	1,437	....	1,462	1,249	266	256	15	148	150	31	83	356	915	897	62.5	71.8	547	273	195	134
Gulf, Mobile & Ohio	April	2,766	7,261	363	8,160	7,371	1,221	1,213	73	1,461	1,333	260	264	2,211	5,494	5,268	67.3	71.5	2,666	1,255	1,082	813
	4 mos.	2,766	28,215	1,498	31,839	29,927	4,575	4,804	256	5,540	5,192	1,029	1,03.	8,947	21,512	21,088	67.6	70.5	10,326	4,792	4,134	3,394
Illinois Central	April	6,538	21,140	1,759	25,650	24,007	3,617	4,067	374	4,048	4,377	671	510	8,685	17,964	18,800	70.0	78.3	7,686	4,170	3,004	1,813
	4 mos.	6,538	82,482	7,490	100,707	100,042	14,913	15,463	1,505	16,932	17,418	2,647	2,023	36,008	74,188	76,188	73.7	76.2	26,519	14,561	9,865	8,468
Illinois Terminal	April	383	844	62	1,014	992	164	150	25	184	151	41	46	382	851	802	83.9	80.9	163	68	89	70
	4 mos.	399	3,245	273	3,893	3,868	620	593	104	706	627	158	168	1,513	3,256	3,225	83.7	83.4	636	295	305	225
Kansas City Southern	April	891	3,566	134	4,110	4,074	512	475	37	430	506	93	100	1,142	2,319	2,315	56.4	56.8	1,792	834	743	683
	4 mos.	891	14,883	522	16,882	16,075	1,863	1,729	143	2,012	1,826	363	365	4,645	9,405	8,974	55.7	55.8	7,477	3,449	2,989	2,717
Kansas, Oklahoma & Gulf	April	327	609	....	615	570	103	109	7	34	47	11	27	122	312	338	50.7	59.4	303	145	123	81
	4 mos.	327	2,400	2	2,422	2,410	337	321	22	133	166	44	111	504	1,184	1,211	48.9	50.3	1,238	589	505	442
Lake Superior & Ishpeming	April	156	369	....	429	429	61	54	12	55	56	15	2	104	234	236	54.7	55.1	194	34	178	168
	4 mos.	156	529	....	603	631	201	180	48	242	249	53	8	240	744	735	123.4	116.6	—141	129	—208	—184
Lehigh & Hudson River	April	96	307	....	308	282	40	46	2	35	30	8	14	87	186	185	60.6	65.6	121	49	43	32
	4 mos.	96	1,119	....	1,122	1,097	156	166	9	122	119	34	56	341	720	725	64.2	66.1	401	160	142	148
Lehigh & New England	April	180	189	....	192	734	43	43	6	77	125	38	12	87	253	400	131.5	54.5	—60	Cr 10	18	191
	4 mos.	180	1,845	....	1,865	2,499	307	263	25	479	511	151	50	626	1,626	1,688	87.2	67.6	239	229	287	520
Lehigh Valley	April	1,164	5,883	311	6,512	6,359	853	842	88	1,090	1,153	208	141	2,416	4,755	4,883	73.0	76.8	1,756	712	925	914
	4 mos.	1,189	22,180	1,226	24,677	26,545	3,094	3,071	347	4,298	4,338	831	562	9,661	18,635	19,133	75.5	72.1	6,042	2,318	3,235	3,944
Long Island	April	365	1,236	3,119	4,596	4,375	649	636	86	920	771	121	24	2,221	3,976	3,730	86.5	85.2	620	506	—155	—69
	4 mos.	365	4,694	11,872	17,516	16,664	2,563	2,527	343	3,561	3,107	486	61	9,061	15,938	16,422	91.0	98.5	1,578	2,004	—1,457	—2,605

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF APRIL AND FOUR MONTHS OF CALENDAR YEAR 1953

Name of Road		Average mileage operated during period	Operating Revenues Freight	Pass.	Operating Revenues (Total (inc. misc.) 1953	Operating Revenues (Total (inc. misc.) 1952	Operating Expenses: Maint. Way and Structures Total 1953	Maint. Way and Structures Total 1952	Maint. Way and Structures Deprec. and Retirements	Maint. Equipment Total 1953	Maint. Equipment Total 1952	Maint. Equipment Deprec. and Retirements	Traffic	Transportation	Total 1953	Total 1952	Operating ratio 1953	Operating ratio 1952	Net from railway operation	Railway tax accruals	Net railway operating income 1953	Net railway operating income 1952
Louisiana & Arkansas	April	756	2,392	49	2,530	2,167	377	366	21	267	265	90	76	606	1,403	1,364	55.5	62.9	1,127	484	560	377
	4 mos.	756	9,145	237	9,742	8,667	1,444	1,382	86	1,076	1,021	336	310	2,441	5,582	5,289	57.3	61.0	4,160	1,911	1,971	1,526
Louisville & Nashville	April	4,737	17,543	1,042	19,905	18,890	2,852	2,764	210	3,948	4,147	767	361	6,486	14,343	14,529	72.1	76.9	5,562	3,201	2,634	2,127
	4 mos.	4,737	69,124	4,282	78,542	77,473	10,762	10,879	864	15,203	16,011	2,995	1,387	25,787	55,797	58,010	71.0	74.9	22,744	12,847	11,257	9,463
Maine Central	April	945	1,943	105	2,216	2,256	474	387	45	357	387	72	23	732	1,667	1,609	75.2	71.3	549	231	229	253
	4 mos.	945	8,100	426	9,198	9,868	1,823	1,664	199	1,438	1,584	287	84	3,079	6,759	6,948	73.5	70.4	2,440	1,105	992	1,109
Midland Valley	April	334	227	....	230	185	50	56	6	14	25	4	5	54	129	164	56.2	88.4	101	43	39	—4
	4 mos.	334	748	....	759	654	179	206	22	56	82	13	21	232	515	582	67.9	89.1	244	91	97	—27
Minneapolis & St. Louis	April	1,397	1,606	6	1,675	1,571	364	342	67	277	287	77	127	569	1,454	1,395	86.8	88.8	221	138	94	53
	4 mos.	1,397	6,676	22	6,932	7,031	1,217	1,138	144	1,048	1,142	308	502	2,302	5,521	5,480	79.6	77.9	1,411	798	575	487
Minn., St. Paul & Sault Ste. Marie	April	3,223	2,801	59	3,088	3,085	856	733	47	635	726	105	70	1,227	2,910	2,970	94.3	96.3	177	233	—55	—119
	4 mos.	3,223	10,093	261	11,137	11,483	2,598	2,498	189	2,634	2,971	413	289	4,931	10,953	11,585	98.3	100.9	184	883	—667	—1,014
Mississippi Central	April	148	241	....	244	241	53	46	2	23	28	3	13	63	163	157	66.7	65.3	81	42	27	30
	4 mos.	148	956	....	968	890	200	176	9	105	106	12	55	265	667	622	68.8	69.9	302	150	105	94
Missouri-Illinois	April	172	512	....	516	441	72	72	4	80	68	20	8	109	275	270	53.4	61.2	241	129	116	69
	4 mos.	172	1,935	1	1,950	1,699	317	269	16	308	283	81	39	482	1,186	1,082	60.8	63.7	764	454	354	294
Missouri-Kansas-Texas Lines	April	3,242	6,510	298	7,441	6,853	1,079	1,030	97	1,134	1,097	227	256	2,402	5,172	5,173	69.5	75.5	2,269	1,011	910	652
	4 mos.	3,242	25,300	1,112	29,144	28,012	4,099	3,879	387	4,421	3,954	909	1,027	9,800	20,605	20,007	70.7	71.4	8,539	3,678	3,392	3,238
Missouri Pacific	April	6,935	17,834	835	20,625	19,542	3,733	3,596	257	3,873	3,845	739	472	7,100	15,840	15,665	76.8	80.2	4,785	1,694	2,504	2,131
	4 mos.	6,935	68,976	3,552	80,156	78,878	14,600	12,547	1,145	15,533	14,925	2,919	1,880	28,915	63,570	61,399	79.3	77.8	16,586	5,733	8,782	8,886
International-Great Northern	April	1,104	3,068	140	3,494	3,258	747	675	37	571	587	112	64	1,186	2,698	2,704	77.2	83.0	796	184	446	259
	4 mos.	1,104	11,683	599	13,334	12,901	2,870	2,619	147	2,215	2,245	426	238	4,785	10,635	10,610	79.8	82.2	2,698	705	1,407	1,073
Gulf Coast Lines	April	1,723	3,787	88	4,122	3,821	875	787	39	550	541	110	92	1,183	2,845	2,748	69.0	71.9	1,276	429	625	426
	4 mos.	1,723	14,486	356	15,787	15,495	3,439	2,902	150	2,122	2,144	422	353	4,733	11,247	10,785	71.2	69.6	4,540	1,600	2,070	1,741
Monongahela	April	178	653	....	657	673	93	92	13	97	76	9	1	234	433	435	65.9	64.6	224	32	56	77
	4 mos.	178	2,327	....	2,341	2,894	334	382	44	318	360	37	4	924	1,615	1,853	69.0	64.0	726	129	69	209
Montour	April	51	223	....	223	199	28	20	3	85	90	19	1	74	199	205	89.2	103.2	24	47	35	36
	4 mos.	51	795	....	800	833	93	85	10	312	343	75	4	280	730	838	91.2	100.6	70	182	171	156
Nashville, Chatt. & St. Louis	April	1,032	3,156	139	3,638	3,509	583	598	53	525	478	128	114	1,128	2,480	2,429	68.2	69.2	1,158	575	553	520
	4 mos.	1,032	11,991	574	13,985	13,482	2,016	2,179	216	2,028	1,941	511	469	4,579	9,644	9,598	69.0	71.2	4,341	2,139	2,106	1,870
New York Central	April	10,716	52,451	9,006	69,894	64,846	9,650	8,447	936	14,393	13,786	2,355	1,072	28,537	57,059	55,123	81.6	85.0	12,836	5,198	6,406	3,838
	4 mos.	10,715	202,272	38,236	273,676	264,354	37,253	33,477	3,728	56,165	57,310	9,428	4,377	117,418	228,970	230,466	83.7	87.2	44,707	20,724	19,189	8,884
Pittsburgh & Lake Erie	April	221	4,015	68	4,353	3,905	533	485	45	1,093	1,181	272	73	1,377	3,308	3,385	76.0	86.7	1,044	771	1,178	722
	4 mos.	221	15,530	292	16,935	16,388	2,015	1,935	168	4,332	4,716	1,073	299	5,682	13,268	13,719	78.3	83.7	3,667	2,664	4,311	3,193
New York, Chicago & St. Louis	April	2,184	13,337	155	13,912	12,298	1,623	1,557	140	2,152	2,128	316	310	4,564	9,102	9,046	65.4	73.6	4,810	2,439	2,027	1,359
	4 mos.	2,184	52,974	635	55,239	53,196	6,648	6,540	561	8,754	8,858	1,298	1,234	18,706	37,146	36,872	67.2	69.3	18,093	9,062	7,473	7,021
New York, New Haven & Hartford	April	1,792	8,176	4,102	13,814	13,302	2,433	2,147	282	2,058	2,199	384	189	5,595	11,068	10,793	80.1	81.1	2,746	1,088	775	677
	4 mos.	1,792	31,746	16,347	54,250	53,856	8,588	8,191	1,099	8,120	8,478	1,516	744	23,134	43,708	43,375	80.6	80.5	10,541	4,351	2,965	3,059
New York Connecting	April	21	343	....	373	339	71	77	25	50	25	....	....	128	251	185	67.3	54.6	122	73	48	75
	4 mos.	21	1,397	....	1,533	1,435	292	283	100	124	126	....	....	396	823	744	53.7	51.8	710	302	383	403
New York, Ontario & Western	April	541	584	....	598	553	128	115	20	97	79	23	25	260	538	502	89.9	90.7	61	35	—46	—37
	4 mos.	541	2,212	3	2,278	2,220	418	417	73	353	332	91	98	1,027	2,016	2,012	88.5	90.7	261	140	—134	—155
New York, Susquehanna & Western	April	120	449	42	518	449	62	60	5	61	67	12	8	211	367	364	70.9	81.1	151	33	58	12
	4 mos.	120	1,658	165	1,917	1,833	226	224	22	243	251	46	34	822	1,430	1,416	74.6	77.3	487	132	184	162
Norfolk & Western	April	2,135	14,787	380	15,854	15,639	2,393	2,395	286	3,309	3,877	633	277	4,706	11,353	11,950	71.6	76.4	4,501	3,152	2,170	1,757
	4 mos.	2,135	55,666	1,541	59,932	68,126	9,130	9,246	1,136	13,699	15,577	2,553	1,166	19,451	46,036	49,160	76.8	72.2	13,896	10,226	6,623	8,819
Norfolk Southern	April	620	958	....	973	998	197	200	13	118	99	27	47	273	698	717	71.8	71.8	275	136	91	96
	4 mos.	620	3,621	....	3,681	3,949	834	775	51	496	476	107	199	1,112	2,941	2,953	79.9	74.8	740	386	199	323
Northern Pacific	April	6,881	13,343	608	15,064	13,776	2,834	2,468	259	2,769	2,894	415	370	5,330	12,096	11,611	80.3	84.3	2,968	1,798	1,272	1,289
	4 mos.	6,881	49,060	2,341	55,678	52,864	9,075	8,717	1,119	11,197	11,769	1,655	1,293	22,126	46,693	46,573	83.9	88.1	8,985	5,899	4,208	2,491
Northwestern Pacific	April	331	1,138	3	1,169	1,163	298	279	20	105	112	4	6	403	835	807	71.5	69.4	333	59	122	150
	4 mos.	331	4,011	7	4,180	3,790	1,306	1,139	72	427	406	17	23	1,638	3,487	3,174	83.4	83.7	693	239	—108	—34
Oklahoma City-Ada-Atoka	April	132	116	....	117	105	21	27	2	1	2	....	2	20	48	57	40.9	54.0	69	30	25	15
	4 mos.	132	345	....	347	397	89	92	9	4	22	....	8	81	195	226	56.2	57.0	152	62	43	50
Pennsylvania	April	10,085	67,900	12,197	89,036	84,778	11,315	12,590	1,401	19,589	17,912	3,347	1,294	35,641	71,413	72,386	80.2	85.4	17,623	8,370	8,204	5,179
	4 mos.	10,087	257,996	49,200	340,680	343,616	43,334	46,696	5,637	76,480	76,657	10,886	5,277	143,952	283,329	294,987	83.2	85.8	57,351	25,127	26,236	20,555
Pennsylvania-Reading Seashore Lines	April	364	633	120	777	787	212	220	24	103	90	17	11	503	865	901	111.2	114.5	—87	122	—338	—342
	4 mos.	364	2,344	414	2,855	3,000	855	860	96	393	371	63	40	2,158	3,592	3,562	125.8	118.7	—737	408	—1,628	—1,445

(Table continued on next right-hand page)

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REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF APRIL AND FOUR MONTHS OF CALENDAR YEAR 1953

Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1953	Total (inc. misc.) 1952	Operating Expenses: Maint. Way and Structures: Total 1953	Total 1952	Deprec. and Retirements	Maint. Equipment: Total 1953	Total 1952	Deprec. and Retirements	Traffic	Transportation	Total 1953	Total 1952	Operating ratio 1953	Operating ratio 1952	Net from railway operation	Railway tax accruals	Net railway operating income 1953	Net railway operating income 1952
Pittsburg & Shawmut	April	97	233	....	234	172	52	41	4	48	48	9	3	56	168	148	72.1	86.0	65	4	89	48
	4 mos.	97	765	....	767	710	175	115	15	210	227	35	14	199	634	591	82.7	83.2	133	20	241	202
Pittsburgh & West Virginia	April	132	754	....	759	734	155	142	23	182	183	37	59	171	606	592	79.8	80.7	153	75	108	98
	4 mos.	132	2,952	....	2,982	2,965	466	470	94	711	775	140	231	719	2,263	2,324	75.9	78.4	719	367	465	444
Reading	April	1,310	9,609	598	10,895	10,758	1,521	1,595	201	2,241	2,101	428	156	3,973	8,296	8,464	76.1	78.7	2,599	1,085	1,487	1,147
	4 mos.	1,310	39,150	2,394	44,366	45,166	6,069	6,287	904	9,086	8,821	1,717	613	16,550	33,948	34,847	76.5	77.2	10,418	4,948	5,391	5,074
Richmond, Fredericksburg & Potomac	April	118	1,491	582	2,453	2,544	393	350	24	325	288	66	24	732	1,659	1,525	67.6	59.9	795	337	305	372
	4 mos.	118	6,030	2,518	9,984	10,384	1,388	1,241	97	1,214	1,200	218	97	3,013	6,367	6,171	63.8	59.4	3,617	1,859	1,199	1,389
Rutland	April	394	373	13	450	447	91	83	10	66	86	13	24	209	423	443	94.1	99.2	27	26	—25	—38
	4 mos.	394	1,539	67	1,865	1,951	318	324	39	287	353	56	91	865	1,681	1,787	90.1	91.6	184	104	—25	—22
Sacramento Northern	April	264	399	....	407	182	65	58	5	20	12	4	2	97	198	159	48.6	87.2	209	70	115	—3
	4 mos.	264	1,661	....	1,689	914	212	242	—31	94	51	16	9	240	696	667	41.2	72.9	993	331	563	115
St. Louis-San Francisco	April	4,601	9,679	431	10,935	9,931	1,701	1,804	232	1,748	1,757	473	335	3,704	8,007	8,005	73.2	80.6	2,928	1,449	1,321	999
	4 mos.	4,601	37,148	1,887	42,253	39,977	6,594	6,813	692	7,175	6,907	1,887	1,310	15,073	32,245	31,845	76.3	79.7	10,007	5,006	4,535	3,802
St. Louis, San Francisco & Texas	April	159	482	3	512	411	70	48	6	39	38	1	25	154	299	272	58.4	66.3	213	110	60	35
	4 mos.	159	1,749	23	1,886	1,754	253	192	19	155	143	4	103	632	1,187	1,091	62.9	62.2	699	327	194	280
St. Louis Southwestern Lines	April	1,567	6,422	15	6,650	6,145	1,206	924	95	778	606	102	171	1,608	3,941	3,483	59.3	56.7	2,709	1,506	933	938
	4 mos.	1,567	25,272	79	26,167	24,764	4,019	2,846	272	2,655	2,513	411	682	6,697	14,734	13,582	56.3	54.9	11,433	6,587	3,827	3,555
Seaboard Air Line	April	4,080	12,271	1,321	14,712	14,545	2,476	2,265	195	2,468	2,523	510	371	4,413	10,295	10,345	70.0	71.1	4,418	1,838	2,202	2,005
	4 mos.	4,080	48,435	5,907	58,952	58,619	9,759	9,060	739	9,805	9,569	2,026	1,530	18,056	41,536	41,282	70.5	70.4	17,416	7,295	8,751	7,951
Southern Ry	April	6,299	20,414	1,302	23,349	21,926	3,057	3,023	241	3,890	4,326	744	424	6,861	15,131	15,998	64.8	72.9	8,218	3,941	3,770	2,182
	4 mos.	6,299	80,818	5,635	93,072	89,246	11,949	12,131	902	15,616	16,858	2,957	1,735	28,203	61,111	65,093	65.7	72.9	31,961	15,716	14,298	9,437
Alabama Great Southern	April	326	1,612	66	1,792	1,680	209	248	2	366	358	71	26	479	1,143	1,198	63.8	71.3	649	331	276	172
	4 mos.	326	6,026	293	6,781	6,547	915	934	77	1,386	1,463	287	139	1,972	4,668	4,929	68.8	75.3	2,113	1,094	864	555
Cinn., New Orleans & Texas Pacific	April	337	3,863	166	4,236	3,821	456	466	35	803	862	176	75	1,005	2,472	2,577	58.4	67.4	1,764	1,034	787	472
	4 mos.	337	14,568	780	16,210	14,966	1,772	1,809	128	3 307	3,311	701	285	4,044	9,928	10,049	61.2	67.1	6,282	3,558	2,804	1,928
Georgia Southern & Florida	April	397	798	80	945	839	178	151	9	82	71	7	8	259	547	567	57.9	60.4	398	107	94	75
	4 mos.	397	2,854	384	3,539	3,200	671	642	31	325	280	27	34	969	2,089	2,030	59.0	63.5	1,450	411	322	277
New Orleans & Northeastern	Apri.	203	1,127	44	1,226	990	144	152	15	124	122	25	20	201	534	569	43.5	57.5	692	391	245	123
	4 mos.	203	4,017	193	4,461	3,852	615	641	60	483	489	101	81	900	2,255	2,386	50.5	61.9	2,206	1,237	767	434
Southern Pacific	April	8,113	39,501	2,932	45,382	44,970	5,642	5,003	440	9,283	9,166	1,715	892	16,282	34,080	33,079	75.1	73.6	11,302	5,938	4,320	4,779
	4 mos.	8,113	154,991	12,752	179,223	172,179	21,679	20,423	1,801	36,715	34,769	6,697	3,434	65,600	135,387	130,778	75.5	76.0	43,837	23,281	16,857	16,493
Texas & New Orleans	April	4,291	11,050	603	12,420	12,272	2,182	1,837	130	1,629	1,791	85	279	4,002	8,686	8,690	69.9	70.8	3,734	1,662	1,094	992
	4 mos.	4,290	46,010	2,373	51,448	50,190	8,519	7,337	506	6,607	7,130	342	1,096	16,566	35,144	34,886	68.3	69.5	16,303	7,465	4,960	4,501
Spokane International	April	152	272	1	285	205	68	59	2	25	20	8	5	57	165	156	58.1	75.9	119	48	55	24
	4 mos.	152	957	4	1,007	820	232	268	9	92	85	32	21	244	632	644	62.7	78.4	375	142	176	80
Spokane, Portland & Seattle	April	944	2,654	71	2,881	2,548	407	415	48	342	279	91	30	824	1,700	1,653	59.0	64.9	1,181	444	641	453
	4 mos.	944	9,776	303	10,678	9,734	1,520	1,497	187	1,368	1,245	377	119	3,184	6,549	6,328	61.3	65.0	4,129	1,538	2,073	1,855
Tennessee Central	April	286	412	3	441	423	109	109	5	67	67	20	12	148	361	347	81.8	82.1	80	27	13	28
	4 mos.	286	1,699	20	1,825	1,748	400	436	19	260	272	78	47	578	1,376	1,426	75.4	81.6	449	101	182	95
Texas & Northern	April	8	141	....	158	95	4	5	....	7	8	2	1	9	27	40	17.1	41.9	131	73	38	15
	4 mos.	8	456	....	499	412	19	24	....	30	35	10	4	50	123	169	24.7	41.0	375	176	120	76
Texas & Pacific	April	1,834	6,580	323	7,479	6,716	1,030	988	84	1,153	1,039	241	192	2,161	4,909	4,593	65.6	68.4	2,570	1,058	1,104	978
	4 mos.	1,834	26,199	1,280	29,802	26,716	4,056	3,853	346	4,541	4,482	972	759	8,943	19,703	18,835	66.1	70.5	10,099	4,068	4,337	3,035
Texas Mexican	April	162	304	....	321	313	60	63	7	27	36	8	9	55	172	187	53.6	59.5	149	67	56	50
	4 mos.	162	1,147	....	1,212	1,118	233	303	29	111	117	32	35	259	722	761	59.6	68.1	490	214	180	127
Toledo, Peoria & Western	April	239	650	....	661	547	124	77	6	43	46	10	51	139	399	325	60.4	59.4	262	127	82	78
	4 mos.	239	2,532	....	2,574	2,305	425	335	24	181	180	39	196	528	1,471	1,353	57.1	58.7	1,104	527	385	345
Union Pacific	April	9,824	36,780	2,670	42,643	38,016	6,980	7,817	628	8,163	7,419	1,215	1,110	14,334	32,772	32,073	76.9	84.4	9,871	6,302	2,254	594
	4 mos.	9,824	142,495	10,759	165,283	157,210	22,907	22,675	1,858	32,523	30,408	4,808	4,023	59,310	127,511	123,806	77.1	78.8	37,772	24,537	8,073	6,761
Utah	April	110	81	....	81	90	15	24	2	44	51	9	1	30	99	127	121.0	142.2	—17	10	—14	—34
	4 mos.	110	373	....	374	607	76	87	8	172	212	37	3	150	435	632	116.4	104.1	—61	39	—58	—52
Virginian	April	611	3,093	2	3,198	3,394	445	506	56	675	867	176	46	788	2,052	2,349	64.1	69.2	1,147	722	596	515
	4 mos.	611	12,348	6	12,741	16,468	1,737	2,038	229	2,891	3,787	685	187	3,092	8,282	10,226	65.0	62.1	4,459	2,833	2,353	3,205
Wabash	April	2,393	8,992	364	10,161	9,289	1,351	1,394	115	1,268	1,282	365	306	4,058	7,365	7,165	72.5	77.1	2,795	1,073	1,197	804
	4 mos.	2,393	34,510	1,615	39,132	37,722	4,801	4,731	432	4,976	5,112	1,441	1,203	15,977	28,439	27,908	72.7	74.0	10,692	4,297	4,498	3,819
Ann Arbor	April	294	749	....	756	651	119	98	6	126	113	30	27	281	573	562	75.9	86.4	182	69	91	36
	4 mos.	294	2,948	....	2,972	2,941	352	372	24	489	463	120	107	1,167	2,195	2,295	73.9	78.0	777	342	361	284
Western Maryland	April	831	3,956	9	4,168	3,921	531	548	45	658	966	172	91	1,185	2,648	3,069	63.5	78.3	1,520	809	879	513
	4 mos.	831	15,760	27	16,595	17,211	1,982	2,039	180	2,895	3,643	694	360	5,045	10,993	12,140	66.2	70.5	5,602	3,060	3,239	2,916
Western Pacific	April	1,193	4,744	248	5,105	4,111	897	634	70	666	677	131	201	1,417	3,446	2,986	67.5	72.6	1,659	898	647	450
	4 mos.	1,193	18,702	1,033	20,140	16,463	3,413	2,694	386	2,559	2,688	509	799	5,648	13,426	12,388	66.7	75.3	6,714	3,444	2,683	1,487
Wisconsin Central	April	1,046	2,583	35	2,801	2,479	353	371	34	413	470	67	62	1,009	1,944	2,061	69.4	83.1	857	341	323	133
	4 mos.	1,046	10,017	140	10,777	10,133	1,319	1,360	143	1,797	1,926	270	261	4,247	8,039	8,361	74.6	82.5	2,738	903	1,116	526

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- **STRENGTH . . . ⅜″ Met-L-Wood panel as stiff as ¼″ steel plate!**
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Whether your plans are for reconditioning old cars or building complete new trains, investigate the full possibilities of this versatile structural material in terms of design, efficiency, economy and beauty.

MET-L-WOOD CORPORATION

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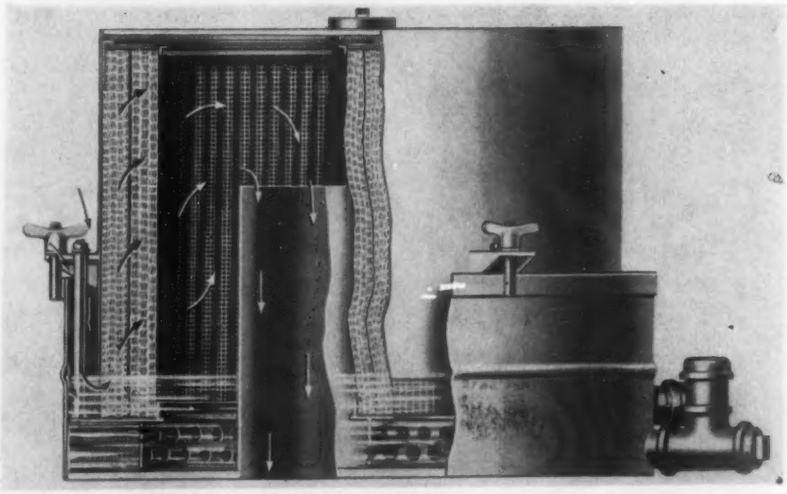
What's New in Products



CUTAWAY MODEL of the Air-Maze oil-bath air filter for locomotive diesel engines.

Oil-Bath Filter Adapted to Diesels

The Air-Maze Corporation, Cleveland, has developed an oil-bath diesel locomotive engine air filter. Entrance in the railroad field of the oil-bath air filter—a proved item in the stationary, automotive engine and compressor fields—was delayed principally because of design problems arising from the limited space available in the locomotive engine room. An efficient air filter must handle air flows varying, for example, from 2,500 cu. ft. at idling speed to 7,200 cu. ft. per min. at full load.

The Air-Maze oil-bath filter replaces the oil-wetted panel or cylindrical-filter assemblies currently used to filter engine air. Depending on locomotive type, the oil-bath filter can connect to present blower or turbo-charger manifolds, or is connected directly to the blower or turbo-charger flange.

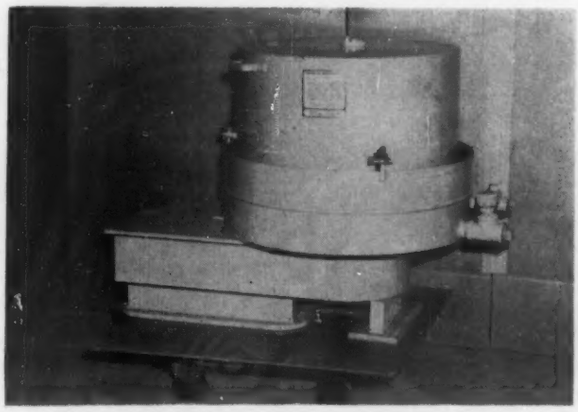
The cutaway model of a filter unit explains the patented filtration principle. Dirt-laden air entering the unit, as indicated by the arrows, is deflected by the skirt toward the oil sump. Air breaks the oil seal at the bottom of the concentric outer channel and changes direction, dropping the larger dirt particles from the air stream. Increased air velocity at this point causes a turbulent scrubbing action of the air by the oil, removing the bulk of the dirt particles. Oil is constantly carried onto the outer diffuser screen and the inner cylindrical filter element by the air stream and washes down into the sump any remaining dirt particles which have been impinged on the filter element. This keeps the filter clean. The filter element also removes entrained oil from the air stream so that only clean oil-free air enters the central tube and thence the air intake of the engine.

Two of the illustrations show models and applications to a switcher and a road unit. Design is progressing to include, eventually, all locomotive types. Currently over a hundred applications on locomotives ranging from 600 hp. to 2,250 hp. are in successful service here and in foreign countries.

Typical servicing procedure is to drain dirty oil and refill with clean oil at periods varying from 30 to 90 days, dependent on local operating conditions. The filter oil generally recommended is the same oil as used in the engine lube system, this usually being a detergent SAE 40 oil. In service where air-borne dirt is not extremely high, the manufacturer encourages filter disassembly semiannually or annually, and at this time the dirt deposit in the bowl can be removed and the entire assembly inspected to verify that all seals, etc., are in good mechanical condition. The filtering element, or screen, is self washing and not subject to the conventional filter cleaning and oiling procedures now in effect on railroads.

All filters extract some energy from the air stream in the form of static pressure loss. In the case of oil-wetted filters, this loss, while relatively low initially, increases as the dirt load accumulates. A high velocity or open channel type effectively resists a high-pressure drop by unloading the collected dirt, if it is continued in service beyond its effective period. A cross crimp type, on the other hand, will effectively resist the tendency to unload its collected dirt but its pressure loss will gradually increase.

While the Air-Maze oil-bath filter has a higher initial static pressure loss than most oil-wetted filters, this loss remains constant at any specific

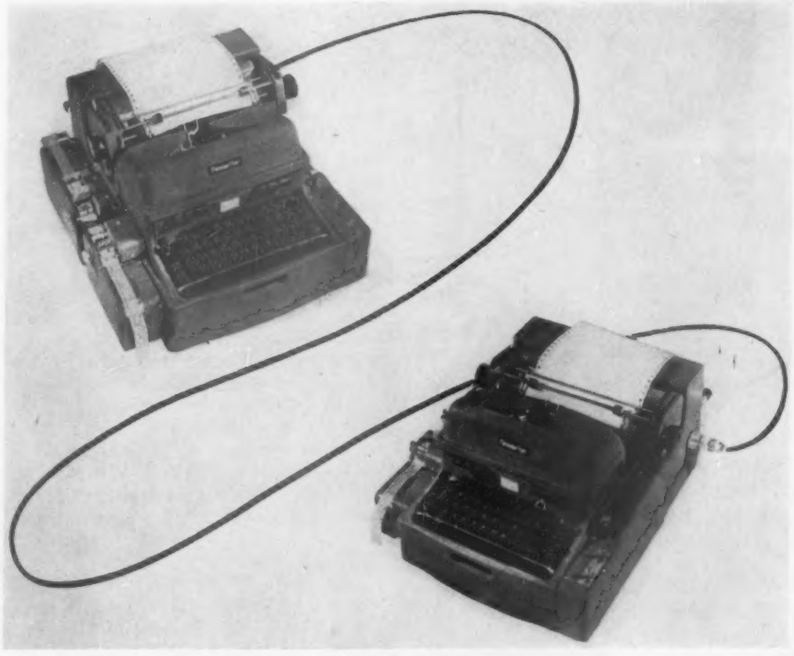


A FILTER ASSEMBLY applicable to a 1,350-hp. road locomotive unit.

A FILTER application designed for a 1,000-hp. switching locomotive unit.

air-flow rate, irrespective of whether the filter has just been serviced or is about to be serviced. Accumulated locomotive test data indicate that the higher oil-bath-filter static pressure loss does not materially affect horsepower at the rail, and if a minor horsepower reduction results, it is more than compensated for by more efficient overall engine operation due to marked reduction in engine wear.

The oil-bath filter offers tangible servicing expense reduction and reduced engine wear, which translates into lower maintenance cost and greater locomotive availability •



Inter-office Teletypewriting System

Model FTM Flexowriter has been announced by Commercial Control Corporation, Rochester, N.Y. The Flexowriter automatically records information as it is being typed on a standard electric keyboard by punching a narrow paper tape with a code. This punched tape can then be used as many times as desired to reproduce automatically the coded information. The Flexowriter system provides for sending a message as a by-product of document writing at one point and simultaneously creating a new document at a remote point.

Two or more of these machines can be connected by a multiple wire cable. The machines may or may not be equipped with tape punching and tape reading facilities; these are not essential to transmitting and receiving messages.

The sending Flexowriter can transmit coded impulses over the cable to control the operation of the remote teletypewriting machine. Communication may be two-way. The typist may transmit to a remote station messages as they are typed on her visible copy, and in return may receive messages which are typed automatically on her own machine.

Because the machines send and receive on their own power, and use a nine-wire cable, they must be placed not more than one mile apart. However, possible installations include teletypewriting between order and shipping departments, between production control and assembly lines, and as straight inter-office communications systems.

An advantage of the Model FTM, according to Commercial Controls, is that all (or any selected portion) of the message may be transmitted to a remote Flexowriter as a byproduct of the preparation of the original document.

Since the functions of the remote machine are under the control of the local operator, a message can be sent to an unattended machine. The inherent qualities of the Flexowriter, including FTM model, enable the sending machine to prepare a form of one sort, while the receiving machine prepares either a similar form, or, if desired, a different one upon which additional data may be locally typed. In either case, only information common to both forms needs to be transmitted between stations.

When not being used for teletypewriting, the Flexowriter FTM may be employed as a correspondence typing unit which, if equipped with tape punch and tape reader, provides all the facilities for standard automatic typing •

Copying Machine's Speed Is Increased

The copying speed of its Copyflex desk-side copying machine has been increased by 50 per cent, the Charles Bruning Company, 4700 Montrose avenue, Chicago 4, announces. The added speed is the result of a revised design which enables the machine to use 220-volt alternating current.

The machine has a 20-in. copying width and can make diazotype copies of any size office form, from a large accounting sheet down to an invoice or small memorandum. Because it can copy letters or ordinary size business communications two at a time, the machine can turn out many thousands of varying size copies daily.

The new, faster machine has been designated Model 15 Copyflex machine. The standard Model 14, which operates from 115-volt current, will continue to be produced in quantity, the manufacturer says, because its speed is fully adequate for most office copying procedures •

New Floor Finish

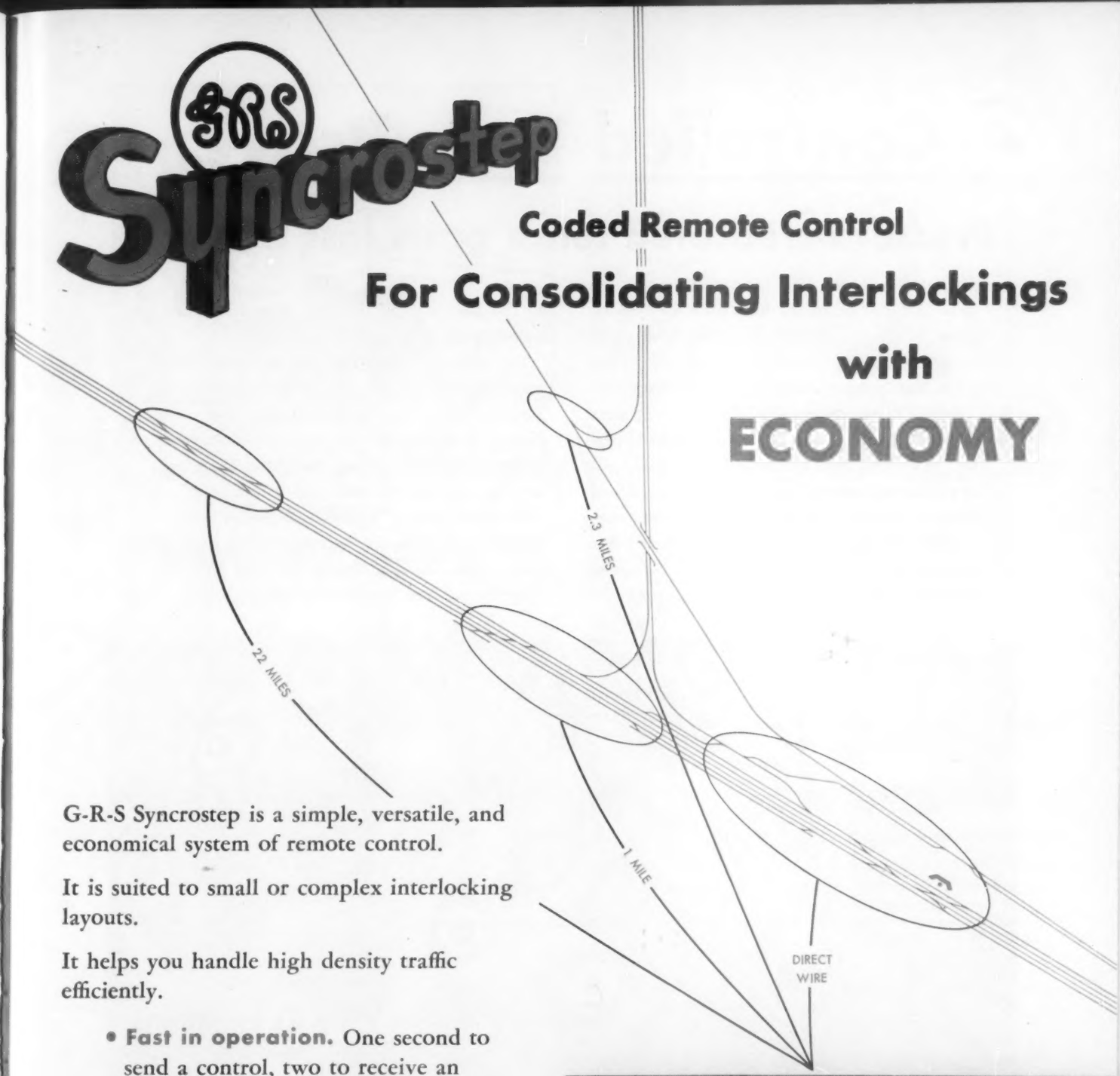
Gripsheen, a new water-based industrial floor finish with unusual slip resistant qualities, has been placed on the market by the West Disinfecting Company, Long Island City, N.Y. Primarily a solubilized synthetic resin, the new protective floor finish is said to give an extremely high gloss without buffing.

According to the manufacturer, Gripsheen provides the highest possible traction on any kind of floor, including terrazzo. One gallon will cover about 1,000 to 1,500 sq. ft. of floor area. The finish is easily maintained by damp mopping. Small floor areas may be patched without refinishing the entire surface. Gripsheen blends well with surrounding areas without showing overlap marks •

G-R-S Syncrostep

Coded Remote Control

For Consolidating Interlockings with ECONOMY



G-R-S Syncrostep is a simple, versatile, and economical system of remote control.

It is suited to small or complex interlocking layouts.

It helps you handle high density traffic efficiently.

- **Fast in operation.** One second to send a control, two to receive an indication.
- **Only two line wires**—over any distance.
- **Simple operating principle.** System requires a minimum of apparatus. It is easy to test and maintain.

When planning interlocking consolidation, ask your G-R-S district office for complete information on the Syncrostep System.

GENERAL RAILWAY SIGNAL COMPANY

230 Park Av. NEW YORK 17 | 122 S. Mich. Av. CHICAGO 3 | Main Office ROCHESTER 2, N. Y. | 611 Olive St. ST. LOUIS 1

A-2651

Controlled Tests Prove

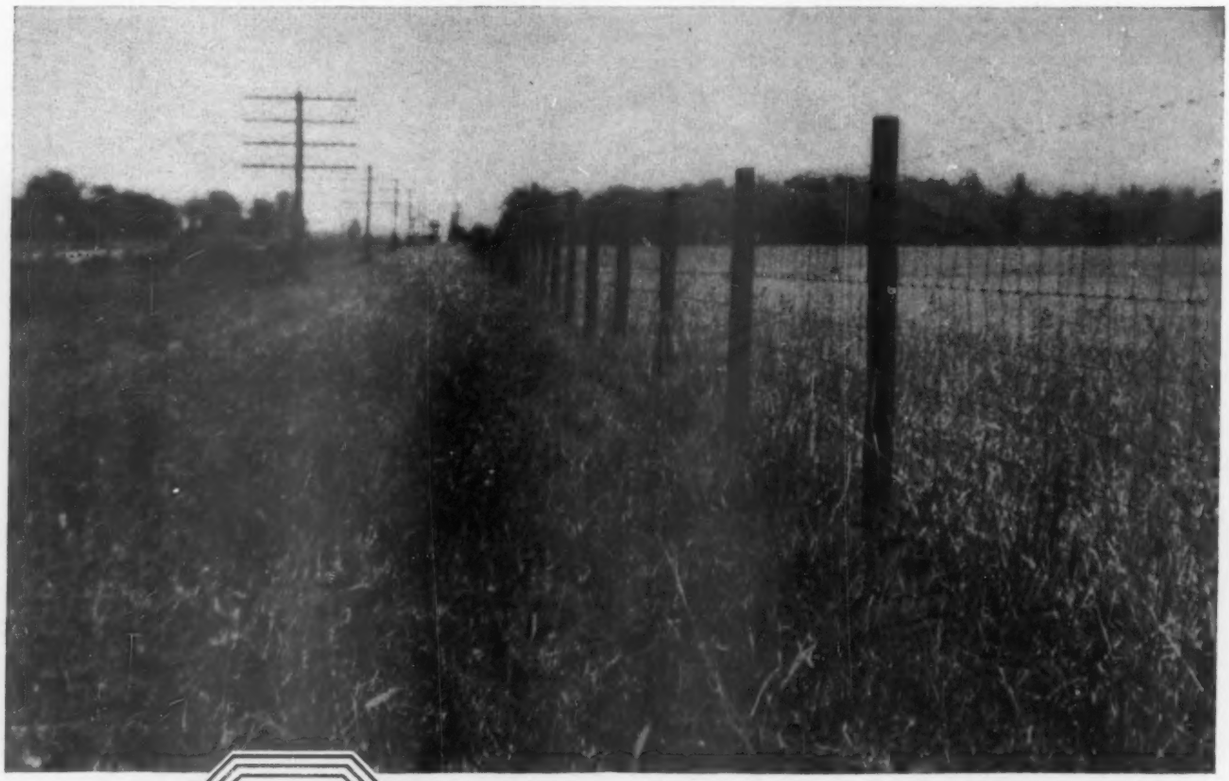
Pressure-creosoted fence posts last longer!

● In 1925 the *Chesapeake and Ohio Railway* made a test installation of treated and untreated wood fence posts, along with a number of steel fence posts. Yearly reports were kept on the test fence. The 1943 Report showed that, after 18 years, almost 90 percent of the untreated posts and about 35 percent of the steel posts had needed replacement. *All* of the creosote treated posts, however, were found to be in good condition with no renewals necessary.

After 24 years, the 1949 Report indicated that the pressure-creosoted posts were still good, and probably possessed another 20 years of service life. By this time, ALL of the other posts had failed, including the steel posts.

The *Missouri-Kansas-Texas* set up a 1000-post, pressure-creosoted right-of-way fence at Denison, Texas in 1922. A careful inspection in 1948, after 26 years of service, showed that many more years of usage could be expected from them. There had been no replacements in this installation.

These are facts. Pressure-treatment with Koppers creosote will add years to the life of your posts, poles, and ties. Specify Koppers pressure-treated wood from the first—to last!



KOPPERS **PRESSURE-TREATED WOOD**

KOPPERS COMPANY, INC. • Wood Preserving Division
Pittsburgh 19, Pennsylvania

A brakeman who hailed from
Des Plaines
Complained of no food for his
brains
Till he heard of the "Age"
Now he eats up each page
And his title is master
of trains

No journalistic service offers the railroad man so much as Railway Age. It is an essential ingredient in the receipe for advancement in the industry.

To derive maximum usefulness from this educational service, why not have Railway Age sent to you at your home? Your own personal copies—with the free biannual index—can provide you with a reference source and serve, at the same time, as a continuing report of news, new developments and new methods affecting your job on the railroad.

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Dept. ..... Title .....

Above rates apply TO RAILROAD MEN ONLY (in the U. S., Canada and Mexico)

Benchmarks and Yardsticks

YOUR REPORTER has been permitted by a generous employer to devote most of his time for the past couple of weeks to participation in the Pan American Railway Congress, at Washington and Atlantic City—an activity which has little immediate or tangible economic incentive connected with it.

The A.A.R. and the Short Line Association, several individual railroads, a number of equipment manufacturers, and many individual railroad men and manufacturers, gave generously of their funds and time to provide a hospitable reception for the visiting railroaders from south of the border.

Is such expenditure of time and money by companies and individuals wasteful? Decidedly the contrary—in the opinion of your reporter. International friendship is certainly an asset to be retained and extended—if for no other reason than the selfish one of maximizing national security. And retaining international friendship is certainly not an assignment which can be entrusted to government alone, with the assurance that government, alone, will succeed in its objective.

Consider, for instance, what is probably the world's outstanding example of international understanding—that between the U.S. and Canada. This understanding, certainly, has a much wider foundation than the fact that Premier St. Laurent and President Eisenhower have easy contact with each other.

It is based, in addition, on the close association of Canadian and U.S. people of all interests and occupations with their colleagues across the international border. Canadian and U.S. railroad man know their fellows across the border as well as they do those at home. So it is with U.S. and Canadian people of all occupations.

Private enterprise, and not just governmental enterprise, is necessary for the existence of genuine international friendship; and the more individual enterprise parallels governmental effort in this desirable direction, the sounder and deeper the resulting international understanding is bound to be. To leave such activities to government alone is, at bottom, a concession to socialistic thinking. There are very few activities—and maybe none at all—which it is safe for individual initiative to relinquish entirely to governmental enterprise.

In addition, of course, there are bright men in railroading in Latin America, just as well as in English-speaking America, and they have experience which may be as useful to us as ours may be to them.

J. G. L.

IF IT'S FROM **Standard's** RAILROAD LABORATORY,

Engineers don't need to be told it's improved if they know it's a *Standard* product!

These *Improved Dreadnaught Drop* and *Rigid Ends* for gondola cars, for instance, are the result of *continuous* change not just one improvement.

The *latest* improvement in the rigid end incorporates the corrugations as semi-restrained beams into an integral structural unit—giving increased protection to the car superstructure. The *latest* improvement in the drop-end forms the bottom flange stiffener into a box form which adds strength as well as a deflector design to eliminate corrosion pockets.

Standard Railway Equipment Manufacturing Company's railroad laboratory in fabricating *today's* products anticipates *tomorrow's* needs . . . and research continues ceaselessly as *Standard's* investment in the future of railroading.

THE IMPROVED IS IMPLIED

Standard

RAILWAY EQUIPMENT MANUFACTURING COMPANY

310 S. MICHIGAN AVENUE • CHICAGO • 247 PARK AVENUE • NEW YORK

An Implied Invitation From Secretary Weeks

Commerce Secretary Sinclair Weeks recently made a noteworthy and heartening speech, dealing briefly but to the point with the railroads (reported in *Railway Age* June 8, page 9). Several paragraphs from this speech could be highly significant, if translated out of the language of principles into that of specific remedial legislation. These paragraphs will repay close scrutiny. They read:

"Misunderstood, Shackled, Punished, Blamed"

"For more than 20 years our private competitive enterprise system has been misunderstood by government, burdened by government, shackled by government, punished by government and then —ironically—blamed by government for not performing as many miracles as it could have, had it been free. The change in Administrations changed that attitude. From here on out every group in our economy is going to get a fair break. . . .

"When regulation departs from its traditional role and encroaches on the field properly allocated to management, it may well slow down the progress and development of the industries being regulated. This has happened and, as a result, the public has not received the best service at the cheapest price, which otherwise it could have received years ago. No group has been more unwisely and unfairly treated than the service industries. Yet the railroads, the power and light, the gas industries and those furnishing communications employ millions of workers, dependent for livelihood on the success of these industries, which are vital to all other industry and to the general consuming public. . . .

"The laws that Congress has passed for the regulation of the railroads, interstate power, gas transmission and communications all are intended to keep those industries healthy and vigorous so that they can render the best service possible to the public at as low a cost as possible in the long run. . . . The average [rate of return earned by the railroads] has been below 4 per cent, which no one can consider equal to a fair return, nor has the commission ever initiated rates to improve the return. . . .

"This Administration believes that it is the intent of Congress in its approach to regulation to allow earnings which will make the system of private ownership work. . . If the regulated industries are to render their full service to the nation, it is my judgment that the regulatory bodies must allow earnings adequate to attract and support the equity capital they can use effectively for economies, improvement and growth. If their credit is thus established, they will be able to obtain from the investing public any necessary borrowed capital. Expensive hand-to-mouth policies can be discarded for long-range programs to give the country better service and lower costs. . . .

"I say without hesitation that it is essential to the welfare of the country that the regulated utilities be regulated in such a manner as to enable them to attract all the capital that they can use in making economies and improving service. . . .

"The evidence is clear that if there were some assurance that regulation would not either by delay or refusal prevent earnings sufficient to attract capital, we might reasonably expect the railroads, for example, to greatly increase their yearly expenditures for plant."

No one who believes in the virtue and effectiveness of capitalist principles, nor who understands the situation of the railroads, can have any attitude except enthusiastic agreement toward these statements by Secretary Weeks. Moreover, President Eisenhower, also, shows his thorough understanding and support of the principles so warmly championed by the secretary of commerce. Specifically, the President in a recent press conference, referred to some aspects of the operations of the Tennessee Valley Authority as "creeping socialism"—a most accurate characterization.

Virtue, in principle alone, however, is insufficient. If the opposition of the President to "creeping socialization," and the insistence of Secretary Weeks on attractive earnings for regulated industry, are to have practical results, these beliefs must be translated into specific legislation. But just *what* legislation? One of the nation's outstanding publicists has outlined the situation in a discerning letter to this writer, as follows:

Do the Right People Understand?

"This is the first time that I can remember when a cabinet officer of the United States has stated that it is an administration's objective to have the railroads earn enough to attract equity capital. . . . I do not know whether the administration understands the various proposals for railroad legislation, but it is the railroads' business to see that it does.

"With the kind of problems facing the ad-

ministration, from Korea to farm surpluses and an unbalanced budget and a million other troubles, it is not likely to figure out the details of railroad salvation. I suspect the railroads will have to do that for themselves in Congress."

Can anyone doubt that this counsel deserves to be heeded? From the standpoint of legislative priority, the railroads appear to be concentrating on the "time-lag" bill to the exclusion (for the time being) of all other proposals. This concentration upon a limited objective is doubtless wise and necessary on the legislative firing line—but educational activity certainly does not need to be limited to such a restricted target. Instead, it could well encompass all legislation necessary to restore the railroads to equity financing.

Secretary Weeks is an honest and intelligent man. He has stated clearly what his goal is for the railroads. Could there be any possible objection to taking him at his word—telling him, telling Congress, and telling the American people just what revisions in governmental policy toward the railroads will be needed to attain the goal the secretary has announced? The measures necessary to that end are, at the very minimum, seven or eight and possibly more. Railroad men know what these measures are, but does the Administration know?

Does Congress know? Does the general public—to whom the Administration and Congress must look for support—know what these measures are?

Pressure Continues on Long Island's Trustee

There is no let-up in the campaign in New York to detach the Long Island Rail Road from corporate ownership and convert it to socialized operation under the Long Island Transit Authority, established by the state legislature with this objective in mind.

It is impracticable to report in a weekly paper of national circulation, such as this one, the daily manoeuvers in this local New York struggle. But it is practicable and important for everybody in the railroad business to understand, at least in broad outline, what is going on here; because it *could* happen anywhere.

The railroad was starved for almost 30 years by an unsympathetic Public Service Commission, a creature of the state of New York. Recently, the Public Service Commission has followed a somewhat more enlightened policy, but certainly not liberal enough to compensate the property, physically, for the decades of systematic starvation to which it was subjected. Meantime—as this paper interprets the action of the state's authorities—the state is endeavoring to make up for the starvation of the road by: (1) Largely expropriating its security holders, through annexing the property at less than 20 cents on the dollar; and (2) remission of taxation, which is asserted (but not proved) to be practicable only under state ownership.

It is the opinion of this paper that the state of New York, if it were to be just and honest in this situation, would compensate the railroad in cash and tax relief for the full amount of which it deprived the company by repressive regulation over a long period. If such restitution were made, the railroad would have no difficulty in financing all the improvements in facilities and service which the most sanguine could hope for.

But political bodies are not given to public confession of their sins, and to restitution. Instead, their invariable habit is to look for a scapegoat. Since Trustee William Wyer is operating the property—tenaciously as is his duty in the interest of the victimized security holders—he is automatically elected as the target of all those who seek to socialize the railroad as the cheapest and politically most expedient way of easing its financial burdens.

Mr. Wyer does not appear to be either terrified or pliable under the bombardment. The attentions he is receiving and his response to them may turn out to be significant precedents when and if parallel situations develop elsewhere, as they are likely to. There would already be situations like that of the Long Island in other large cities, if suburban passenger operations were segregated from freight service.

"Railway management must not let public proclamation of its many past successes and present accomplishments dull its awareness of any uncorrected shortcomings or neglected opportunities. Favorable public relations and effective publicity is as necessary to good railroading as modern equipment. Both of the former are essential to symbolize the progress and ambitions of individual companies in terms of the living men who run them. However, these individuals must turn a deaf ear to such words of praise lest they prove to be siren songs that lull them into complacency. . . . It is all right for others to believe these reports, but the subject must never do so. He may meet the tragic fate of Narcissus, a young man of Greek mythology who fell in love with himself."—*R. K. Bradford, vice-president, Denver & Rio Grande Western, before the Rotary Club of Salt Lake City.*

Many roads already "slant" promotional material to camera users, who become unpaid salesmen for rail travel, but the medium has not yet been exploited to its full extent

A PRETTY GIRL is photographed in Utah's Bryce Canyon. The snapshot, shown to friends when vacation is over, tells, often more eloquently than words, of the wonders of the West, and thereby becomes an effective salesman for the UP.

TO INCREASE PASSENGER BUSINESS . . .

Railroads Encourage Camera Fans

Tourists with cameras are persuasive salesmen for the travel industry. This is forcefully demonstrated by the results of recent research which indicate that 50 per cent of all vacationers travel to places they have seen in snapshots, color slides or home movies. It follows logically that the transport agency which promotes amateur photography by encouraging picture-taking in its territory is using an extremely effective device for increasing business.

Regardless of the region under promotion, or the population group appealed to, a picture in words or in art that tells of a traveler about to use a camera is eye-catching and thought-provoking. Advertising illustrations and text have often said: "This is beautiful—this is important." But a suggestion to bring and use a camera says: "This is so beautiful it's worth keeping forever!" Hills for hikers, beaches and lakes for swimmers, historic sites for all, are cast in a new, exciting dimension when copy or illustration proclaim them worth photographing.

Although the more advanced skills of the camera club member take him out of the casual tourist class, the quantity and intensity of his photographic practice make him well worth cultivating as a source of transport revenue. Even this publicity potential in camera club activity is

A BILLBOARD designed to quicken the pulse of every camera user, and the SP knows there are lots of them!

"COME TO WASHINGTON and bring your camera" says this Chesapeake & Ohio advertising photograph. It promises a snapshooting feast for the "camera bug" and is good advertising for the railroad.

PERPETUAL PROMOTION
80%
of all vacationists carry and use their cameras
93%
of them show their pictures to friends at home
HALF of all vacationists have seen amateur shots of their vacation choice
42%
of this group say amateur pictures DEFINITELY influenced their final choice

SELLING POWER of photographs taken on vacation is vividly shown by this chart, based on careful research. Note the percentage of vacationers who say pictures definitely influenced final choice of vacation spots.

dwarfed, however, by the promotion possibilities offered by 50,000,000 average Americans who take pictures on vacation. For every one of them, the opportunity and the suggestion to take unusual pictures is an impetus that adds extra merit to other attractions of season, service or schedule.

The camera industry's sales suggest that a daily average of 5,000,000 snapshots is taken. That totals almost 200,000,000,000 photographs every year of the people, places and types of play the American family most enjoys. At least 35 per cent of these snapshots are thought to be travel pictures, taken on vacations or shorter trips. On this basis, over 1.5 million snapshots are taken every day just on vacation travel subjects, more photographs than in any other category of subject except children.

Many railroads, aware of the fact that every snapshot taken in their territories is an experienced traveler's personal testimonial to the attractions therein, already have taken advantage of the travel-sales potential linked to photography, the public's favorite hobby. By encouraging travelers to bring their own camera, they have helped establish a reservoir of public goodwill toward travel by rail.

A. A. Dailey, general advertising manager of the Santa Fe, says: "Our lecturers, ticket agents and promotion staffs

are constantly urging prospective customers to 'take along a camera and bring back your own picture memories of the trip.'" To further encourage rediscovery of the west via the Santa Fe, the road's recent magazine advertisements show even stations to be part of "picture land." Illustrations of tourists snapping the Albuquerque station promise the Santa Fe a permanent place in thousands of family albums. Six camera club trips were promoted on the Santa Fe last year for nearly a thousand snapshooters. Photographs taken on those trips will be telling the Santa Fe story in public shows and exhibitions and in magazines and family albums for years to come.

A "local" camera club trip on the Wabash from South Bend, Ind., to Montpelier, Ohio, included as passengers two photographers from New York City, several from Minneapolis and one from Buffalo! The promotion value of that trip reached a great deal further than the actual number of miles covered.

The Baltimore & Ohio, through use of flyers for its stations and posters for sporting goods stores, every year enlists several thousand skilled amateur photographers in is sales force. B&O camera club trips utilize an open-doored baggage car as a cross-country cameraman's dolly. Four heavy slats across the opening make a safety barrier five feet high with one-foot openings between bars. From these cars, as well as the regular lounge and observation cars, B&O territory is becoming the most photographed terrain outside Hollywood.

The Chesapeake & Ohio's advertising, even when dealing with obviously photogenic Washington, D. C., makes sure the reader conceives of his trip as a picture-taking one. In headline and illustration it directly suggests that travelers take pictures—which, by increasing the pleasure of the trip, not only encourage repeat business, but will spread the idea of C&O travel.

The Chicago, Burlington & Quincy, to add sales power to its advertising, describes in full the snapshot possibilities of its "Vista Dome" cars. A booklet on the "California Zephyr" says: "Vista Domes are excellent locations for taking pictures," and adds basic hints on just how to photograph through the dome. On the train, a typed handout offers instructions on use of various films, filters and exposure guides. With on-the-spot timing, Burlington hostesses use the public address system to call attention to picture possibilities of approaching scenes and then add a few words on exposure times to use through glass. All of which makes it difficult to leave CB&Q territory without becoming an unpaid salesman for the line.

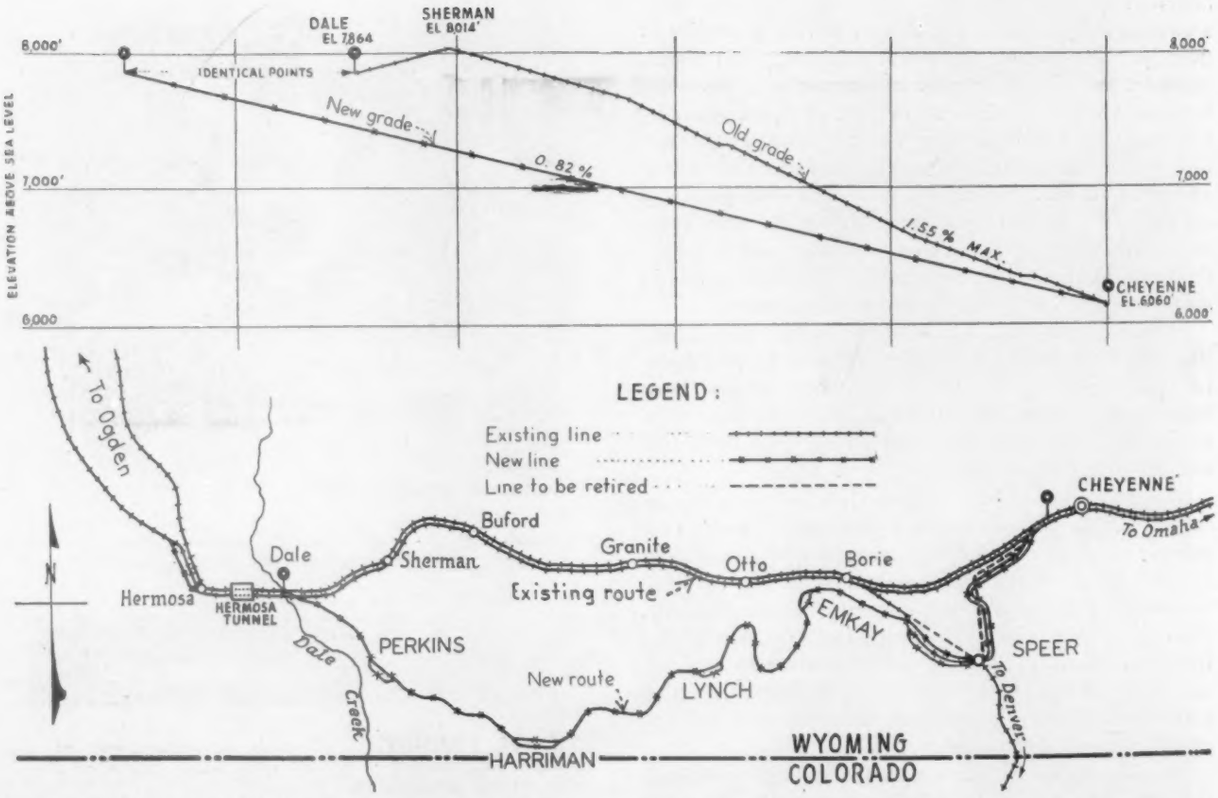
The Great Northern utilizes another medium to attract the business of the camera-carrying tourist. Releases to editors of newspaper travel pages are based on photography in Glacier National Park and other "tours that might well be named Camera Tours."

The picture of the camera carrying tourist has probably appeared with greater frequency in Canadian railroad advertising than in American. Canadian railroad advertisements regularly alert readers to the "thrills and excitement of taking pictures" on a vacation in the Dominion. Forewarned by advertisements that "every trip should be a camera trip," visitors to Jasper National Park via the Canadian National took over 20,000 snapshots one year. The next year 25,000 were taken.

TRAVEL PROMOTION through encouragement of the tourist snapshooter is a well established phase of Canadian travel advertising.

Camera Enthusiasts
FAN EXCURSION
Sunday, February 18, 1951
FROM
WASHINGTON, BALTIMORE
and PHILADELPHIA to
New York City, N. Y.
Visit Model Railroad Exhibit of the
New York Society of Model Engineers
at the Lackawanna Terminal, Hoboken, N. J.
See the many interesting attractions in the Nation's largest city.

AIMED DIRECTLY at camera fans is this Baltimore & Ohio "flyer."



REDUCTION OF THE GRADE against westbound traffic was the principal objective of the project. Although the new line is nine miles longer than the old one, it is expected running time of trains will be cut 15 minutes.

MODERN MACHINES SCORE AS . . .

UP Completes Line Change

Equipment and procedures, proved in normal maintenance work, overcome all obstacles in completing large project months ahead of schedule

Grading begun February 18, 1952; last rail laid February 16, 1953—six months ahead of schedule. So reads the record on one of the largest railroad construction jobs of the times—the Union Pacific's $16-million, 42-mile line change between Cheyenne, Wyo., and Dale.

The new line, single track for most of its length, is designed to carry the road's westbound traffic around Sherman hill, which, at an elevation of 8,014 ft., is the highest point on the UP. As can be seen from the accompanying map and profile, the new line features a uniform grade against westbound traffic of 0.82 per cent compensated on curves. Although the new route is 9.54 miles longer than the old it permits as much as 15 minutes to be cut off westbound schedules.

From the standpoint of construction, the project is outstanding in that it was completed with remarkable speed—speed made possible by extensive use of mechanical equipment and modern methods in all phases of the operation, from initial grading to final dressing of track. The grading work included construction of a

COMPLETING THE RECORD

This is the third and last of a series of feature articles in Simmons-Boardman magazines on the UP's Sherman Hill line change. The first article, which appeared in *Railway Age* September 1, 1952, described the physical characteristics of the new line, told of the operating benefits it would produce for the railroad, and gave an account of the equipment and methods being used in doing the grading work, then in full swing. The second, published in the June 1953 issue of *Railway Track and Structures*, placed primary emphasis on the machines and practices used in constructing the tracks. The present article, summarizing some of the more outstanding features of the project, is in the nature of a "completion report." The new line officially went into operation on May 12.

GRADING OPERATIONS, which involved the handling of seven million cubic yards of material, were carried out with large fleets of modern earth-moving equipment.

DEEP CUTS such as this one were made possible only because of the availability of modern types of grading equipment. One of the cuts was 110 ft. deep.

RAIL-LAYING WORK was done with two cranes, one for handling the rail into position in the track and the other for supplying rail to the forward crane.

TRACK RAISING ahead of all tamping operations was done with power jacks. Granite ballast was placed to a depth of 8 inches under the ties.

ELECTRIC VIBRATORY tampers (two four-tool, hand-held outfits) were used for much of the initial tamping work.

TWO MATISA TAMPERS were used to do the final tamping for the entire new line, and for tamping the first raise for part of the distance.

THE NEW TRACK is laid with 133-lb. rail supported on treated 8-ft. ties. All the rail was end hardened, about half at the mill and the rest in track after it was laid.

TWO-WAY RADIO was an important factor in speeding completion of the project. Shown here using the radio in his car is F. W. Tomlinson, assistant engineer.

775,000-cu. yd. fill, 165 ft. high and 530 ft. wide at its base, and a rock cut 110 ft. deep, which required removal of more than 300,000 cu. yd. of material.

The rate at which the track-laying work was executed is shown by the fact that the last rail was being laid at the same time that the final yard of grading material was being bulldozed into place. This feat was made possible with the aid of efficient track-laying machines and fast means of transporting men and materials. Moreover, the new line was ballasted, tamped and dressed in less than 2½ months after the completion of grading, with the aid of modern, efficient tamping machines which made it possible to overcome delays incurred by notoriously inclement weather in late stages of the work.

These accomplishments were not made possible through use of special equipment adaptable only to construction work, but by methods and devices adapted from routine track-maintenance practice.

By July 1952 enough finished subgrade had been completed on the east end of the line to permit track-laying work to begin. When the track gang caught up with the grading crews it was shifted to the west end, where it worked until again stymied by grading operations. The track gang was thus shifted about from place to place until the last rail was installed—on the same day that grading was completed.

Conventional practice was followed for the most part in laying the track—with two possible exceptions: The method of tie distribution; and the means used to supply rail to the rail-laying cranes.

After spikes, bolts, washers, tie pads and grease cakes had been distributed along the line, semi-trailer trucks, driven on the subgrade, distributed the ties, which were placed along the center line and spaced 22 to the rail. A small gang of men placed tie plates on each end of the bored ties, and a following crew tacked the plates on one side by means of an outside rail-holding spike driven into a bored hole.

Rail was shipped to the new line on flat cars and was handled and laid by two rail cranes. The second crane merely kept the forward or rail-laying crane supplied with rail throughout each day without delay. This system contributed greatly to the high rate at which the track was laid—4,000 ft. per day.

Tamping Operations

The work of tamping the track began on the Fourth Main, one of the two tracks built from Cheyenne to Speer, which was scheduled to be the first placed in operation to handle Cheyenne to Denver traffic. Tamping, begun on the east end of this 6-mile section, was completed by September 1952—considerably ahead of schedule.

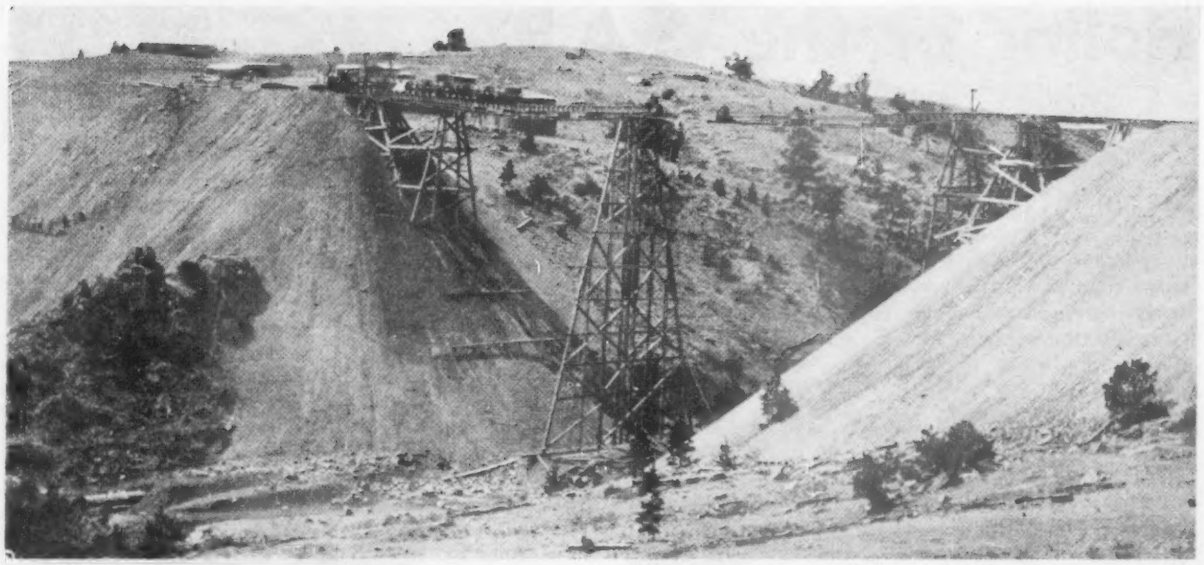
This phase of the project was executed by raising the entire Fourth Main, including its connection to the Borie cutoff, a full 8 inches at a time. Two 4-tool electric tampers were used in the normal manner, employing a power jack to raise the track to spot boards set on grade stakes. The tampers, after raising the Fourth Main, started at the east end of the Third Main (the new westward track between Cheyenne and Dale). This track, too, was raised a full 8 inches with the electric tampers.

Two Matisa tampers carried out the final phases of the track-raising operation, which was reorganized with the objective of putting the new track in service shortly after the first of May. That schedule required that an average of more than a mile of track per day had to be tamped for a period of two full months.

Spurred on by the approaching deadline, the raising and tamping units stepped fast in the fourth week of April, until they pressed close on the heels of the survey party establishing final line and grade. During that week, the Matisas tamped 41,979 ft. of track, averaging 8,396 ft. per day. Entering the home stretch with such a good beginning, the tampers were never "headed" and sped down to the final wire at Dale somewhat ahead of the deadline.

Additional flexibility in train operation over the new line will be realized when the full C.T.C. installation, now under construction, goes into operation. The new installation will permit control of all main track crossovers and siding switches from the Cheyenne dispatcher's office, including the now locally controlled interlockings at Borie and Speer.

Operation and scheduling of the many pieces of equipment used on the project were greatly facilitated by use of a Motorola two-way radio communication system. Installed primarily for operation of survey crews before roads were built, and used later to coordinate all work in the area, this VHF device helped greatly to conserve supervision time. With it, emergencies were reduced to



CABLE RAILWAYS represented the ultimate in grading mechanization 50 years ago. This view, reproduced from the *Railway Age* of February 8, 1901, shows a high fill under construction on a line change of the Union Pacific at Sherman hill, which had been completed during the previous year.

History Repeats Itself . . .

MECHANIZATION THE KEY TO SUCCESS IN 1900 AS IN 1953

Sherman Hill line changes are by no means new in the annals of the Union Pacific. Over half a century ago a project, similar in many respects to the one just completed and described in the accompanying article, was carried out. In reporting on this, the first of such projects, the *Railway Age* of August 9, 1901, in an article entitled "The Rebuilt Union Pacific," stated:

"Thirty-three years ago, when the Union Pacific was originally built, it would have been an absolute impossibility to construct the roadbed as it exists today. Under the conditions then existing it seemed near enough to the impossible to build a road that would carry trains at all, and there was little room left for the criticism that the work might have been so accomplished that the haul could be made more economically. Thirty-three years ago there was no money to spend on gigantic engineering works like several of those just completed . . . Moreover, the requirements in the matter of time made it imperative that the work should not delay, and, what is more to the point, the engineer not provided with unlimited time and inexhaustible resources would have been open to the charge of madness had he even suggested the following of the line where the trains of the Union Pacific now run through Wyoming. The work even now in many places has been such as to call out all of the resources of modern engineering talent. With the methods of handling earth and rock in vogue thirty years ago, the totals in time and money required for the work as it now stands would have risen to such an amount as to have suggested at once what was perhaps good practice in the days of the building of the Pyramids in Egypt, but not to be tolerated in America in the nineteenth century. It is a remarkable fact that the original engineers secured so good a line as that which has been in use until the present, and it is in no way to their discredit that so much of their work has been undone. The wonder is, rather, that they succeeded in doing their work so well."

Such were the comments made upon the first attempt to improve the line originally laid over Sherman hill by General Grenville M. Dodge in 1865. *Railway Age*, in reporting on the "modern methods and equipment" used on the project, stated on February 8, 1901: "Work of construction was begun immediately with a big force of men, teams, steam shovels, etc.; no less than 20 steam shovels, with their full equipment of cars and locomotives, in addition to several thousand men, and teams, being employed on the work."

A tremendous contrast is evident when one compares the "modern" equipment mentioned above with present day machines which were used on the most recent line change project and which were described in the September 1, 1952, issue of *Railway Age*. Nevertheless, it can be clearly seen that in 1900, as in later years when the line was further improved and double-tracked, such improvement was (and always will be) directly geared to man's progress in development of better machines and methods. Now, in 1953, the story is basically the same—were it not for the superior construction equipment and methods which are available today, this task, the magnitude of which would have completely staggered the imagination of engineers at the turn of the century, could never have been accomplished.

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incidents, delays from break-downs in machines were cut to the minimum, and work-train orders were kept up-to-the-minute, being altered instantaneously as conditions required. Above all, supervision, generally miles apart, conferred at will and saved untold gallons of midnight oil.

General supervision of the planning and construction of the new line was in charge of W. C. Perkins, chief engineer, and J. A. Bunjer, assistant chief engineer. Mr. Bunjer also was in direct charge of all field operations until September 1952, when he assigned this responsibility to F. W. Tomlinson, assistant engineer. R. E. Denham was project engineer for Morrison-Knudsen, contractors handling all grading work. Company forces, in charge of a roadmaster, handled all track-laying, raising and tamping work.

Hollar of the A.A.R.

Newest vice-president, whose career has spanned railroad, government and supply trade fields, comments on some current problems

Hanging on the wall in Philip A. Hollar's office in Washington, D. C., is a certificate showing that in 1923 Mr. Hollar enrolled as a special apprentice in the Pennsylvania's Altoona shops. He pursued this training on an off-and-on basis until 1925, when he obtained a degree in mechanical engineering from Purdue University. Two years later the apprenticeship was completed and Mr. Hollar was appointed a motive power inspector on the Pennsylvania. Thus began a railroad career which, by circuitous routing, was to lead to an appointment in 1952 as vice-president—assistant to president of the Association of American Railroads. Mr. Hollar is, at 50, the newest and youngest of seven A.A.R. vice-presidents.

The two-rows-at-a-time philosophy that marked Mr. Hollar's early days on the Pennsylvania stayed with him, making him, still, a hard fellow to catch. A former associate tells the story of how he once spent a week trying to arrange an appointment. This was two years ago. Hollar was a special assistant to the Defense Transport Administration, and the air was thick with freight car problems. The former colleague persisted until one day he caught the special assistant on the fly. He was invited to "come over to the apartment and we'll talk while I take a shower." Mr. Hollar recalls those *were* busy days.

Philip A. Hollar

Expanded Car Program

It was about this time that the railroads embarked on their expanded car program, and the production of 10,000 freight cars a month was being promoted as the only permanent solution to grain-on-the-ground in the mid-west. Today, the grain is up but car production isn't. Shortages of materials fixed that. Present car loadings are not running as high as in 1950, however, and the need for a rapid build-up of the car fleet has diminished. It is conceded the railroads must order more cars to reach their established 1,850,000 goal, but a "stretch-out" is not the exclusive right of the military. This prospect should not, Mr. Hollar thinks, cause concern among car builders. When the builders were living, or trying to, under the Controlled Materials Plan, they had to schedule production nine months or more ahead. Now, with materials in a free market, a backlog of six months' productive capacity should keep a car builder protected.

Passenger equipment is something else again, and on this subject the A.A.R. vice-president speaks with some vehemence. The railroads have less passenger capacity than in 1945, a fact which frets mobilization officials generally. Mr. Hollar feels the military services haven't helped the situation by leasing airplanes to irregular air carriers for practically nothing. The result has been a heavy movement of troops by "non-sched" air carriers while the railroads are cast in a stand-by role. "We are," in Mr. Hollar's words, "rapidly becoming the carrier to handle the peak load only." There is some National Guard business, and an occasional reserve unit going out for summer training, but passenger capacity can't be built on scraps. A war would find rail carriers short of facilities on the passenger-carrying side. And the air carriers? Mr. Hollar doubts if the aviation gas and the pilots, and perhaps even those extra aircraft, would be around in sufficient volume to be of much help.

The unbroken string of equipment problems in recent years has resulted in proposals that the government buy freight and passenger cars and stockpile them, leasing or selling them to the railroads when the need arises. Mr. Hollar comments that this idea certainly would not help balance the national budget. Not only that, but a crisis-minded government with cars in its hip pocket would soon have these cars out hauling government freight—removing incentive for the carriers to provide such equipment. If this doleful prospect were avoided, the stockpiled cars would deteriorate from corrosion and obsolescence.

If the government had been less gracious about fostering and subsidizing railroad competition, there would be no car-shortage problems. This is the heart of Mr. Hollar's case against stockpiling. He argues that railroad hope habitually outstrips revenue when it comes to improving plant and equipment. The carriers must get funds from current revenue or from borrowing, and they cannot borrow more than revenue produced by prospective traffic will warrant.

"I don't know how long it is possible," Mr. Hollar remarked recently, "for one industry to compete with three or four that are subsidized, with the subsidized agencies inclined to seek all manner of restrictions on the unsubsidized agency. There is a place for all forms of transport. Shippers make us all. But each form of domestic transportation should pay its own way and not saddle part of the cost on the taxpayer. If there is a real

need, in the national interest, for a subsidized operation, the thing should be out in the open so the public can see it and know what it is. I think if the trucker paid his full share of cost, including so-called 'tax equivalents,' i.e., payments comparable to taxes paid by railroads on fixed facilities, his charges would be closer related to true overall cost. The diversion argument insinuates that truckers should make no contribution to the general welfare beyond their share of the cost of highways."

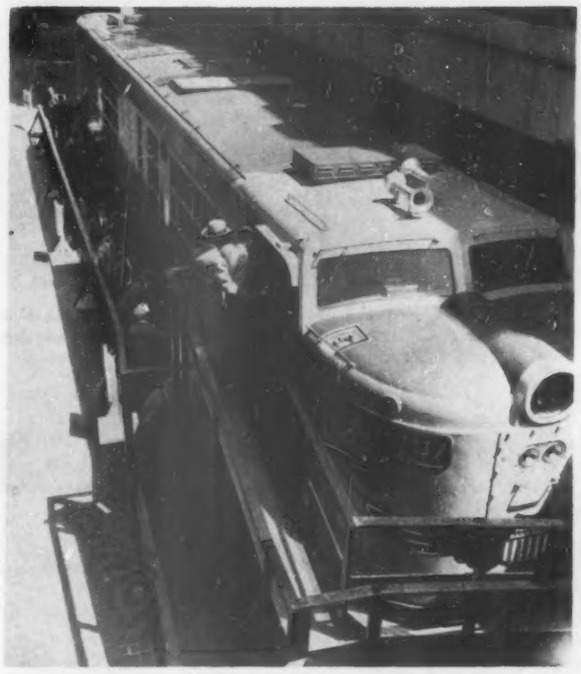
Mr. Hollar, who insists he is no crystal-ball expert, is not disposed to guess about the fate of legislation the railroads want passed during this session of Congress. He thinks the national interest requires a review and modernization of the government's approach to implementing the national transportation policy; and he is enthusiastic about the job being sponsored by the Transportation Association of America. T.A.A. has sent Congress its initial report on transportation laws, and the A.A.R. vice-president thinks the group may be effective because it has done an "excellent job" of arousing interest at local levels.

Wartime Experience

The circuity which led to Mr. Hollar's arrival as an A.A.R. officer had its beginning ten years ago. World War II had just started. Mr. Hollar, by now assistant stores manager on the Pennsylvania, was loaned to the A.A.R. as assistant to vice-president in the Operations and Maintenance Department. He arrived in Washington just in time to make a brief side trip, "on loan," to the Office of Defense Transportation. Brigadier General C. D. Young, director of O.D.T.'s Equipment and Materials Section, had been called to active duty with the Army, and Mr. Hollar took over the section for four months as acting director. He then returned to the A.A.R. position, where he became the industry's chief trouble-shooter on government controls. It was an exacting task, requiring the ability to sift through a vast bureaucracy and produce answers in a hurry. A reporter who covered transportation during the war recalls that he was favorably impressed with Mr. Hollar in those days because "he knew what was going on." In wartime Washington the reporter found that refreshing.

American Car & Foundry Co. bid successfully for Mr. Hollar's services after the war, and in 1946 he moved to Chicago to join that company as a vice-president. The war's end found railroad equipment in tatters, and the supply trade offered a challenge to a high-powered low-pressure salesman. Except for several months with the government, Mr. Hollar stayed with A.C.F. until his recent return to the A.A.R.

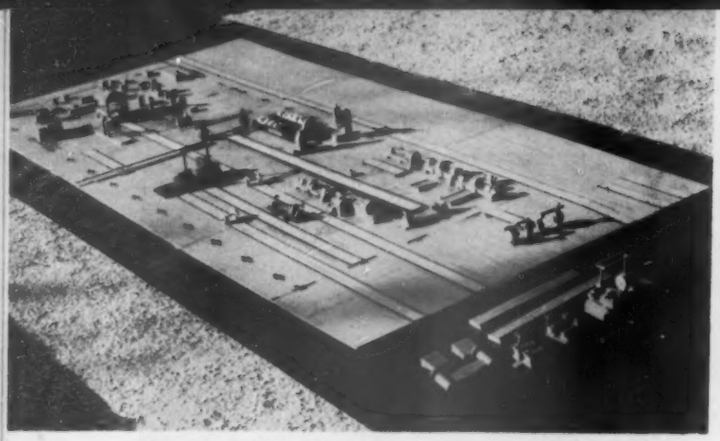
This government service again was on a "loan" basis. Mr. Hollar spent some 18 months in Washington, first with D.T.A. as special assistant to Administrator James K. Knudson, and later with the Commerce Department, where he was Deputy Under Secretary for Transportation. The Commerce post was a new one, created by one of President Truman's reorganization plans. There was some concern in transport circles that this new activity might infringe on the independent regulatory agencies, specifically the Interstate Commerce Commission. The Commerce team of Secretary Sawyer, Under Secretary Delos W. Rentzel, and Deputy P. A. Hollar soon put minds at ease. They fathered a small policy organization, reducing the staff to less than 20, including the stenographers. The intervention talk died down. This situation has not changed under Secretary Weeks and Under Secretary Murray of the Republicans.



MORE THAN 9,000 PERSONS, including railroad and traffic executives, inspected this General Electric gas turbine electric locomotive when it was displayed in Chicago May 14, 15, 16 and 17, by the Chicago Tribune, through cooperation of the Union Pacific. The new 4,500-hp. unit, one of 25 ordered by the UP, was routed through Chicago en route from Erie, Pa.

Tangible evidence of Mr. Hollar's year at the Commerce Department is the existence of a group known as the Transportation Council. This was the idea: Bring together a group of experienced men to give the Secretary of Commerce professional advice on transportation matters. Secretary Sawyer saw the obvious merit in the plan. The council was established and has functioned so well that Secretary Weeks, who succeeded Sawyer, is retaining it. The council represents both providers and users of transportation. It is understood to have committees at work on such problems as excise taxes on transportation, but all sessions are off-the-record and Mr. Hollar, who served as initial chairman of the group, thinks they should be kept so. He says any good they may accomplish will stem from the fact that "we are free to talk among ourselves."

The A.A.R. position which Mr. Hollar fills was created at the time of his election by the A.A.R. board in October 1952. Heretofore, the association has not had a vice-president—assistant to president. This has resulted in his precise duties being only partially defined. Among other things, he supervises the Purchases and Stores Division, an activity for which he prepared by serving from 1934 to 1940 as chairman of the division's Fuel Committee. His other duties involve substantially what his title indicates—assisting President William T. Faricy.



SCALE MODEL of the floor plan and equipment in the wheel shop, which was instrumental in arriving at the final layout of the new facility.

MILL BORING only one size wheel is fed by duplex loader (left) while the mill handling different sizes is fed by single-arm loader (right).

T&P Builds "Model" Wheel Shop

New facility laid out after a thorough study, which included a scale model of floor area and equipment to be installed

A short time ago the Texas & Pacific moved into a wheel shop laid out with the aid of a scale model of the floor area and the equipment to be installed. The new facility, at Marshall, Tex., handles all types of wheel work for the entire system—diesel locomotive, passenger and freight car.

The model was only one part of the study made by the road in arriving at the final proposed layout. None of the usual steps were skipped. Preliminary layouts were drawn up and revised, conferences were held to study the preliminary layouts, and numerous visits were made to shops of other railroads to incorporate the best ideas from these existing shops into Marshall.

It was only after arriving at what was felt to be the ultimate in design that could be developed on paper that the model entered into the plans. The various movable parts of the model—tracks, axle racks, lathes, boring mills, wheel presses, cleaning machines and inspection equipment—were laid out to conform to the latest preliminary layout on paper. These were shifted around to investigate additional layout possibilities.

The arrangement finally adopted as a result of shifting around and studying the model was substantially different from the final paper layout, and it is felt that the improvement in efficiency that should be attained will fully justify the time and expense involved in making the model. It was particularly helpful in overcoming the handicap of laying out a wheel shop in a stub-end area, which makes it necessary to take completed work out the same end at which unfinished work enters.

The completed shop occupies an area 98 ft. by 178 ft. 9 in. in the northeast corner of the freight-car shop building at Marshall. The outdoor area north of the building is devoted to scrap-iron storage racks, a concreted storage space for new wheels and a loading area. The latter has two depressed tracks, one for scrap wheel loading and one for trash loading, with a platform along the outside edge of each.

The wheels in the storage area are grouped by types, with the type of wheel in each group indicated by a small metal sign. This system offers maximum flexibility to change the amount of storage space devoted to any group as conditions change, and it does not require changing a fixed layout for such things as stockpiling one type of wheels for a car building program.

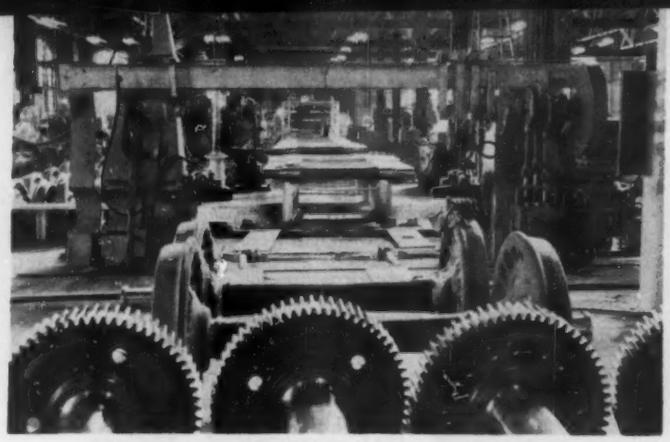
Mounted wheel sets are stored on trackage east of the shop building. Two of the tracks extend into the shop, one being the outgoing wheel track and the other the incoming wheel track. Outdoor axle racks are located between the wheel demounting track and the wheel-and-axle unloading track. The demounting press, the axle cleaner and two axle storage racks to serve the press and cleaner are also located outdoors east of the shop.

Material-handling equipment installed in the shop is divided into five principal classifications: Monorail systems, gravity-feed axle racks, dolly tracks, jib cranes and miscellaneous shop trucks.

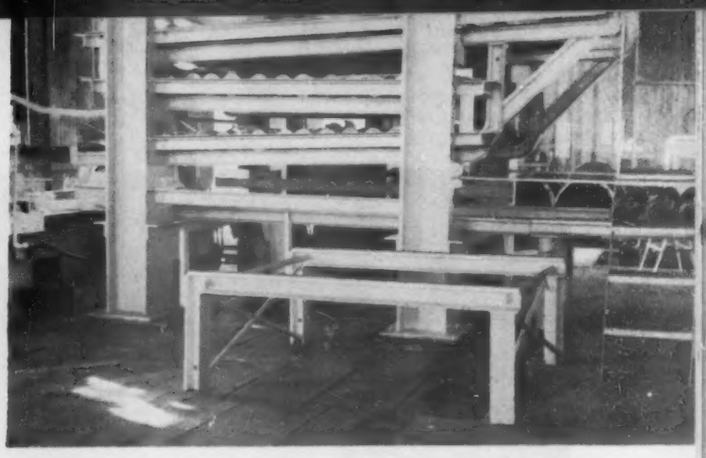
The monorail system serves nearly every major machine in the shop, and has an outdoor branch for bringing axles into the shop. The gravity-feed axle rack extends 95 ft. from the combination journal and axle turning lathe to the wheel press, feeding the press from this machine without further handling of the axle. Dolly tracks and jib cranes serve local areas, while a fork lift truck handles loose wheels and diesel axles with the traction gear in place.

Each wheel is bored to the fit size for the seat on which it is later to be mounted. While new axles are made standard, different wheel seat diameters are entirely permissible on a second-hand axle. Step-size axle-turning and wheel-boring are not practiced for two principal reasons.

First, wheel boring capacity at Marshall is greater than axle lathe capacity. It is therefore an advantage to keep axle turning work to the minimum consistent with good wheel shop practice. Second, individual measurement keeps the wheel seat at maximum size. This improves the chances of fitting the axle when it comes back into

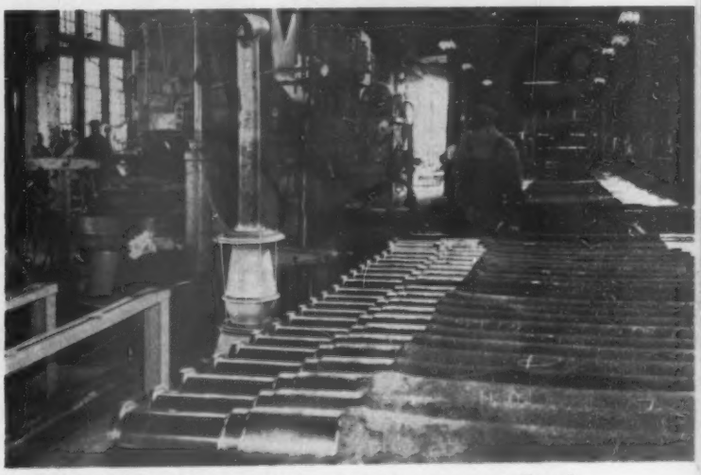


CAR-WHEEL MOUNTING is through operation, with wheels placed on the axle at the far side of the press and discharged from the near side.

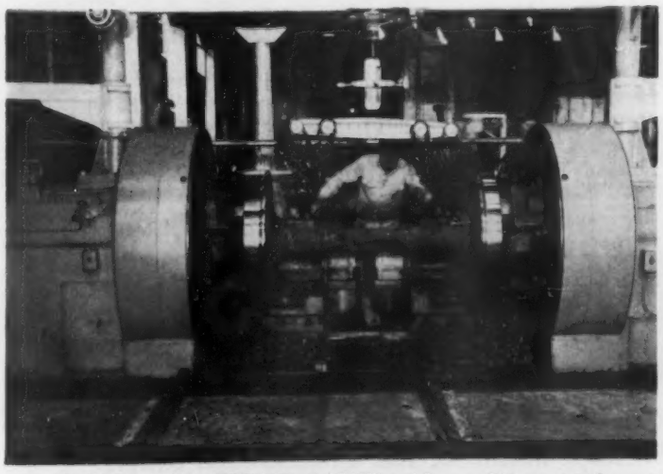


AXLES are gravity-fed to lathes by loaders, of which the above is typical. Control is by lever reached from the operator's station.

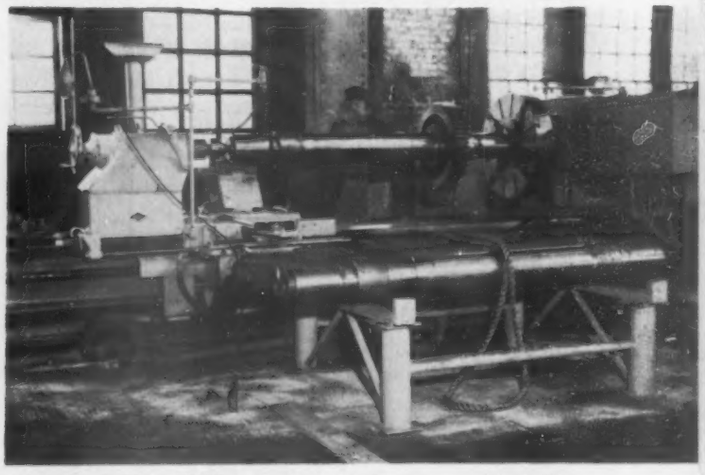
LOOSE WHEELS are delivered to the shop six at a time by a fork lift truck which is fitted with a detachable loading arm.



WHEEL SEATS are not turned to step sizes on secondhand axles, but miked individually after a minimum cut and the wheel bored to fit.



NEW CAR WHEEL LATHE with profiling attachment turns treads at 27 r.p.m. to within .005 in. out of round.



NEW DIESEL AXLES are turned all over on this lathe, secondhand ones checked for a maximum throw of .030 in.

the shop the next time. Finally, it does not reduce production because the gravity-feed axle rack runs close to the boring mills, and the mill operator, while boring one wheel, measures the wheel seat for the next wheel to be bored.

A 56-in. journal lathe and two car axle lathes were converted from center-drive to end-drive to facilitate handling and to permit carbide tooling. A new straight gear drive on the car axle lathes increased the maximum turning speed from 40 to 200 r.p.m. The journal lathe has a fluid drive clutch and a triple chain sprocket drive, which increased the speed from the original maximum of 48 r.p.m. to 222 r.p.m. The same design of tool is used on the above three lathes as on the combination axle and journal turning lathes, permitting greater efficiency in tool grinding and a reduction in tool inventory.

FOUNDING OFFICERS of the R.P.R.A. were picked by the membership to serve the association again during the coming year. They are, left to right: J. D. Parel (Association of American Railroads), secretary and treasurer; G. C. Frank (Erie), vice-president, Eastern region; B. E. Young (Southern), vice-president, Southern region; J. B. Shores (Texas & Pacific), president; and G. H. Kneiss (Western Pacific), vice-president, Western region.

RAILROAD PUBLIC RELATIONS ASSOCIATION . . .

Holds Its First Meeting

Only an idea in 1950, it has grown into a mature organization which now has a "close-to-the-ground" convention to its credit

Stop to consider. Public relations thinking deals with the most precious property of your business—its reputation."

With those words did William G. Werner, manager of the Procter & Gamble Co.'s division of public relations, keynote the first annual meeting of the recently formed Railroad Public Relations Association at Chicago, June 8 and 9. The manner in which it was conducted was perhaps best summed up in the words of Col. Robert S. Henry, vice-president, Public Relations department, Association of American Railroads, when he said: "This has indeed been a close-to-the-ground, clear and sensible meeting."

By most standards, the R.P.R.A. convention was short —only 1½ days. It was almost entirely a "working" meeting, in that association business matters were carefully confined to one short session early on the second morning. And throughout the working sessions, there was a premeditated degree of informality that allowed virtually every member present to contribute something.

The public relations officers gathered for a three-fold purpose:

- To share their problems and experiences;
- To hear how the railroad industry's public relations rate with those the industry serves; and
- To study new tools and concepts from sources outside the railroad public relations field.

What's right and what's wrong with the railroad industry from the viewpoint of the press was presented in a panel discussion featuring Nancy Ford, transportation editor of the Wall Street Journal, and Vincent S. Jones, director of the news and editorial office of the Gannett Newspapers, Rochester, N.Y.

"Sound public relations," said Miss Ford, "should be the honest communication or translation to others of a company policy, a product, a service—or even a person, by simple friendliness. That friendliness, that communication must not be a mere veneer to cover a poor product or service or to defend a policy that's indefensible. That kind of public relations, sooner or later, buys only ill will—and plenty of it."

Of stockholder relations, Miss Ford said: "There's one thing I can't understand, and I think it is the worst kind of stockholder relations. It is a deficiency for which the railroad industry is notorious. Its managers have a pitifully small amount of their personal funds in the enterprise for the management of which they are responsible. This, to me, is one of those 'indefensible' policies."

R.P.R.A.—ITS AIM AND PURPOSE

To promote, sponsor and foster the development and effectiveness of public relations within the railroad industry by exchange of ideas, opinions and experiences regarding public relations as it pertains to individual railroads in particular and the railroad industry in general.

To improve the relationship and cooperation between those engaged in public relations and other officers and employees of the railroads.

Commending the Santa Fe's current advertising campaign (*Railway Age*, March 30, page 21), Miss Ford termed it a "positive approach to the truck competition problem, which contrasts with the negative approach which has caused such unfavorable publicity in the East."

She attacked the "so-called public relations man who centers all press relations in his own office. Such men aren't worthy of the name. If your officers persist in living in an insulated ivory tower, tell them it's later than they think. You owe it to them, yourselves and to the public. The need today is for more, not less communication," she concluded.

Speaking as "a regular passenger and a token investor in three roads," Mr. Jones characterized railroad officers as "capable, hard-working, demanding, in love with their work—but somewhat narrow. A man who rides in a private car or on a pass, and for whom reservations are always available, rarely knows how the other 99 per cent travel."

From a newsman's standpoint, he said that "the gospel of truth and cooperation extends with minor variations through most high officials and the top echelon of operation personnel. But beyond that it disappears. Minor officials can't, won't or don't talk. Plain employees either clam up or are actively hostile. At headquarters and division points things are friendly and practical. At way stations remote from the brass, the boys either play it safe or haven't heard of the public relations revolution."

He suggested a "brain washing on the psychological fixation that, since railroads lose money carrying and feeding passengers, they are doing a favor to let passengers on trains at all. The public, which knows little of your problems—and cares less—feels it pays a fat fee for rail travel and finds it difficult to believe that bright people could work so hard for so little purpose financially."

A suggestion that public relations officers might be given the title "information officer," in the sense that the British now use the term, was put forth by James G. Lyne, editor of *Railway Age*. "Public relations," said Mr. Lyne, "is a somewhat pretentious term. It expresses the ultimate objective rather than the work the practitioner actually does, which is, in the main, imparting information."

In press and media relations, the authority of a public relations officer can be definite, Mr. Lyne said. However, in the wider aspect of public relations, the officer "does not have and cannot have full authority and responsibility because these aspects involve the entire personnel of the company."

Later he said further that "taking the public relations assignment to mean just what it says, the public relations officer should have the duty and opportunity to make whatever contribution he can toward improving the popularity of his company with the public. By himself, for example, he cannot apply the most practicable known methods for selecting and training employees and supervisors, but he can dig out and marshall such information and turn it loose where it is most likely to produce a favorable effect."

"Railroads," he said, "are just as much a 'growth industry,' technologically and economically, as the chemical business or the electric utilities. The industry does not actually enjoy that standing today because it is suffering from a bad public relations position which was frozen onto it by legislation and tradition which is fully a half-century behind the times. This situation can be changed, but only by the mightiest public relations effort ever put forth in business history. The effort can succeed only if it can, within the industry itself, overcome some of the unfortunate effects of the unique persecution for ancient sins to which the railroads are still subjected."

COL. HENRY'S SURPRISE

Completely unaware that he was to be honored by the new organization, Col. Robert S. Henry, vice-president of the Public Relations department of the Association of American Railroads, came to attend all sessions of the R.P.R.A. meeting.

He was visibly startled when J. B. Shores, of the Texas & Pacific, and association president, turned to him at the annual dinner, addressed him as "Mister Railroad Public Relations," and presented him with a silver tray on which was engraved: "Presented to Robert S. Henry by members of the Railroad Public Relations Association in recognition of his achievements in the field of railroad public relations and for his contributions to the profession."

In accepting the tray, Col. Henry could only say: "For the first time in my career you find me speechless!"

New Tools

Current public attitudes toward business and businessmen were detailed by Walter G. Barlow, vice-president of Opinion Research Corporation, Princeton, N.J. From a nationwide survey of adult voters, Mr. Barlow's organization concluded that there is a "rising tide of opinion against governmental regulation of business." He said that the opportunity was never better for business to talk about itself.

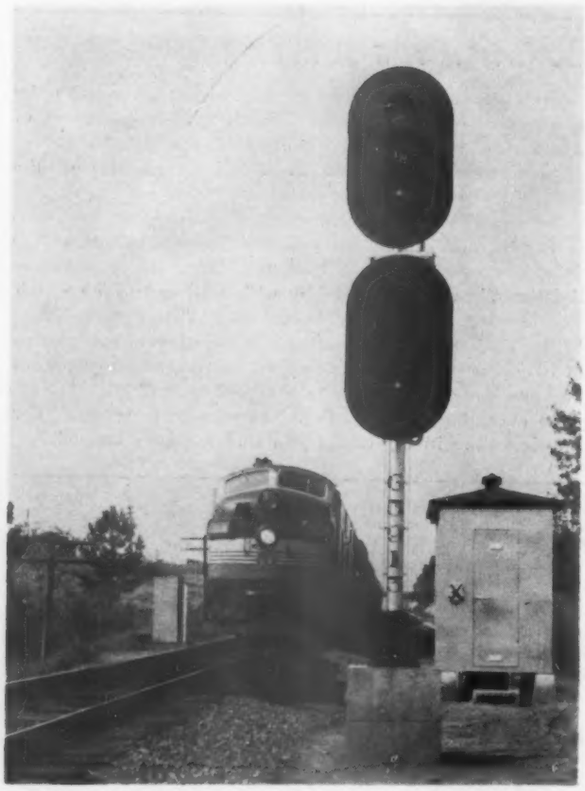
Albert C. Van Dusen, vice-president and director of public relations for Northwestern University, conducted a chart presentation of psychological aspects of human behavior.

People act on feelings, not logic, he said. They like to be sure of themselves and "belong" to an organization. "It's the job of supervision to incur that feeling in order to build teamwork."

Two features of the program allowed free-flowing exchange of members' problems and experiences. Both features were informally conducted.

The first was a "Workshop Smorgasbord"—panel discussion of five public relations case histories. They covered problems that ranged from the handling of unprofitable train discontinuances to the introduction of a new president to all employees of a 1,200-mile system.

The second was a "Cracker Barrel" conference on selected topics, which were drawn from an actual barrel placed in the center of the meeting room and about which the entire membership sat in a great circle. "Piggy-back" (the hauling of highway truck trailers on railroad flat cars) held the spotlight during much of this two-hour conference. However, to preserve the completely frank and open character of these sessions, the press was asked to refrain from reporting on the actual discussion.



TRAIN MOVEMENTS are authorized by signals, which are controlled by the dispatcher.

On 163 miles of single track, cost of complete C.T.C., with power switches, was cut to meet requirements of traffic volume, by using siding-to-siding blocks and coded track circuits

SAL Adapts C.T.C. to 10 Trains

On 163 single-track miles, not previously signaled, between Birmingham, Ala., and Atlanta, Ga., the Seaboard Air Line has installed centralized traffic control.

On this subdivision, train movements were previously authorized by timetable, train orders and manual block. Passing track switches were operated by hand-throw stands, and no automatic block signaling was in service. Extensive mileages of automatic block signaling, as well as centralized traffic control, have been installed during the past decade on the Seaboard, so the management is well informed concerning benefits of both systems of signaling. The last automatic block system installed on the Seaboard was on the 272-mile section between Monroe, N. C., and Atlanta during 1944-45, when there was a critical shortage of materials.

The Seaboard is convinced that centralized traffic control—rather than automatic block—is justified on a single-track line with comparatively light traffic, i.e., 10 trains daily. The problem, therefore, that was given to the signal department as applying to the Atlanta-Bir-

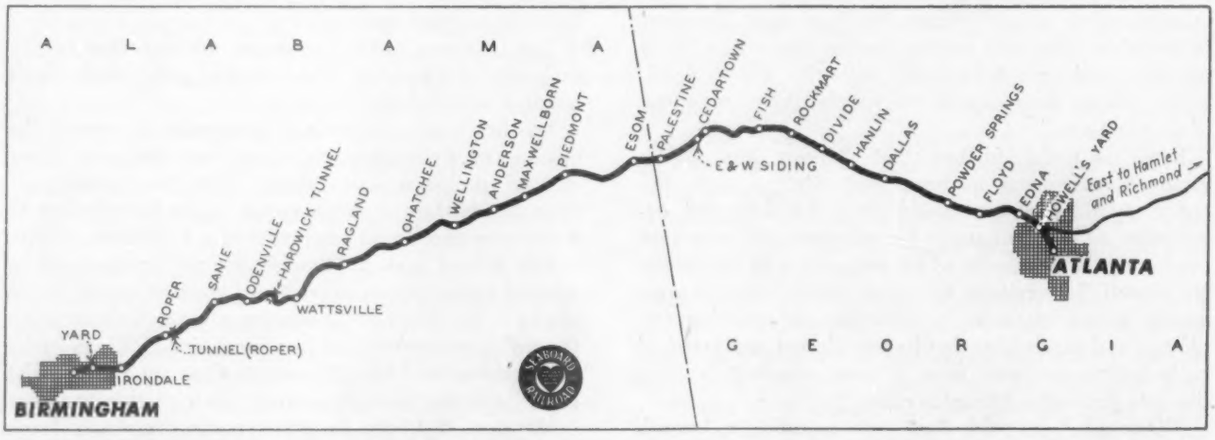


FIG. 1—MAP showing locations of principal cities and sidings in the centralized traffic control territory.

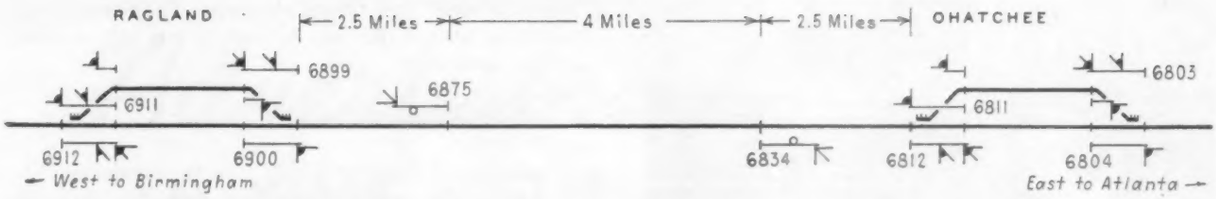


FIG. 2—TRACK AND SIGNAL PLAN for the Ragland to Ohatchee siding-to-siding block.

mingham subdivision, was to plan the use of signal aspects, and to devise circuit arrangements, as required, to reduce the costs for centralized traffic control, so it would not cost too much more than conventional automatic block signaling. The difference in first cost is, therefore, justified by train time saved and reduction in operating expenses effected by the C.T.C. Furthermore, the C.T.C. provides added track capacity so extra trains can be handled effectively at any time, without interference with scheduled trains.

Grades, Curves and Tunnels

Birmingham is the west end of the Seaboard line which extends northeast through Atlanta for 485 miles to Hamlet, N. C., where connection is made with the Seaboard's north-and-south line between Richmond, Va., and points in Florida.

In the 125 miles from Atlanta west to Wattsville, the railroad traverses rolling, hilly country, with numerous short grades, ranging up to 1 per cent, and curvature ranging up to 6 deg. One grade, of up to 1 per cent, extends for 6.5 miles, ascending eastward from Rockmart through the tunnel just east of Divide. In the 38 miles between Wattsville and Birmingham, the railroad passes through a rough mountainous section, with numerous curves. In the 9 miles between Wattsville and Odenville, there are five curves ranging up to 4 deg.; nine to 6 deg.; one of 6 deg. 40 min.; one of 8 deg.; and one of 9 deg. Also, this section includes the 1,369-ft. Hardwick tunnel and another tunnel.

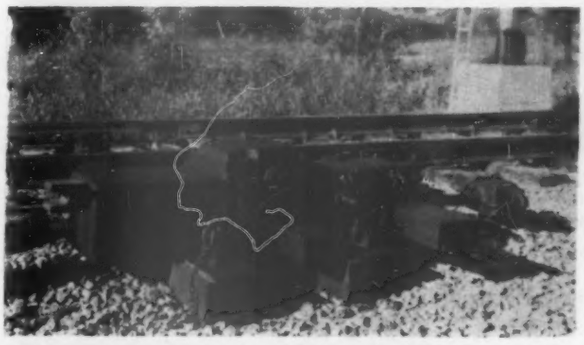
Ten Scheduled Trains

Maximum permissible speed for passenger or freight trains on this subdivision is 60 m.p.h., but with restrictions for curves and other circumstances to as low as 20 m.p.h. The schedule for this Birmingham subdivision includes two passenger and three freight trains each way daily, totaling 10 trains. Extra trains are operated as required, but, usually, the scheduled trains can handle the traffic.

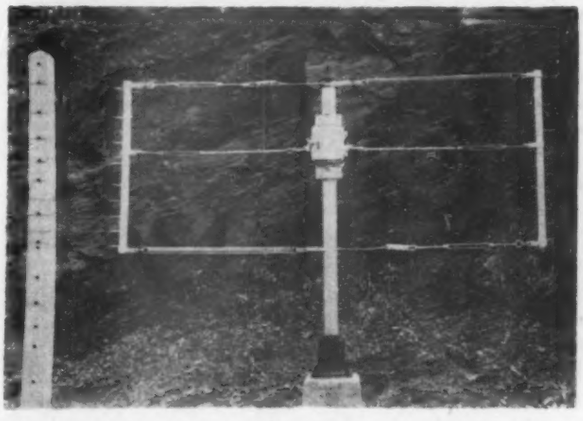
The "Silver Comet," passenger train, makes the 161.5 miles between Birmingham yard and Howell yard near Atlanta in 3 hr. 23 min., an average of 47.7 m.p.h. The "Capitol," merchandise freight train, makes the run from Howell yard to Birmingham yard in 5 hours. All trains are operated by diesel locomotives.

In the operation of scheduled trains, there is no instance in which a freight train would be on the time of a passenger train of the same direction so that the freight would take siding to let the passenger go by. Thus, an analysis of present and foreseeable future train operations showed that the train time that might be saved by permitting following trains to be spaced less than siding-to-siding distance, would not justify the cost involved to provide for such spacing. Accordingly, a decision was made to arrange the signaling to authorize trains to move from siding to siding, with no provision for following movements into such siding-to-siding blocks.

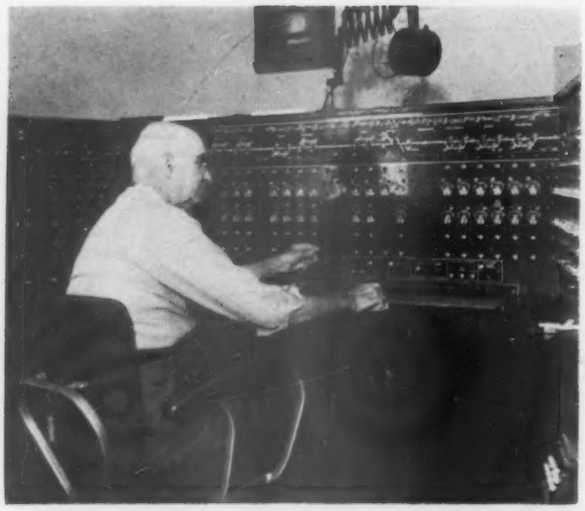
This permitted use of two-position "red" or "green" signals (Fig. 2) for leaving signals, such as eastward main-line signal G6900 and leave-siding dwarf at Ragland, and westward main-line signal G6811 and leave-siding dwarf at Ohatchee. These signals display "red" for "stop," or "green" to authorize a train to go to the next siding. Accordingly, there is no need for intermediate



SIDING SWITCHES are power operated by electric switch machines controlled by the dispatcher.



ROCKS THAT ROLL DOWN from cliff toward track, strike this fence and operate controller which sets signals to stop trains.



THE DISPATCHER, by means of C.T.C. system, controls the power switches and the signals for authorizing train movements by signal indication.

signals, as ordinarily used, to space following trains. Therefore, the only signals needed in the entire nine miles between Ohatchee and Ragland are G6875, which is a distant signal for G6899; and G6834, which is a distant signal for G6812. If automatic block signaling had been installed, conventional practice would have called for intermediate blocks about 2¼ miles long, using three double locations of signals, totaling six intermediate signals, compared with only the two distant signals in the C.T.C., as shown in Fig. 2.

Coded Track Circuits

Track circuits between sidings are the coded type, and are normally de-energized. They are turned "on" to feed through from one track to another, throughout an entire siding-to-siding block, when lining up to clear a signal. The track circuit feed in a siding-to-siding block is in the direction opposite to the train movement to be made. Thus, the signals are controlled by these track circuits and by the C.T.C. line code system, thereby eliminating local signal line wire control circuits, as ordinarily used in automatic block signaling.

Change-Over to Automatic

A special feature of this installation is that, if the C.T.C. code circuit from the dispatcher's office fails, the system automatically changes over to a form of approach-clearing, siding-to-siding block signal system. When the system is thus operating, as approach clearing, power switch machines at sidings may be controlled locally by trainmen. On the instrument house, near each power switch, is a small cast-iron controller case, the door of which is locked with a standard switch padlock. For example, if a westbound train on the siding at Ohatchee is to use the switch (the dispatcher's control being inoperative), a trainman opens the door of the case. Inside each case is a panel with two key holes which fit standard switch padlock keys. To cause the switch to operate from normal to reverse, the key is placed in the hole marked "switch reverse" and turned clockwise. To operate from reverse to normal, the key is used in the hole marked "switch normal."

A 163-Mile Buried Cable

A feature of this installation is a two-conductor No. 10 copper cable, which was buried along the track for the entire 163 miles. This cable was buried, 18 to 22 in. deep, by a cable plow. The two wires in this buried cable are used for telephone carrier as well as the d.c. codes and carrier for centralized traffic control. Three-channel type-C carrier is used primarily for telephone service.

Rock Slide Detectors

As part of this new signaling, rock slide detector fences were installed at 15 locations. These fences are made of hog wire fencing on reinforced concrete posts for fences 8 ft. and lower, and on creosoted poles for fences above 8 ft. All the fences are alongside the tracks. They are designed and so located that they will intercept rocks that may fall or be rolling down toward the track.

The fencing is free to move lengthwise in loose holding devices on the posts, and is stretched tight lengthwise under tension of coil springs. When a rock strikes any part of a fence, the pull operates a circuit controller at the center of the fence. The fences range in length from 75 ft. to 435 ft. and in height from 4 ft. to 32 ft.

When a rock operates a controller, this causes a "red-over-yellow" aspect to be displayed on signals which govern trains approaching the detector fence from both directions; this includes station-leaving signals and distant signals if so located. This aspect indicates "proceed at restricted speed." The only condition which will cause this aspect to be displayed at these locations is operation of a slide detector fence controller.

Motor Car Indicators

This territory includes three tunnels, ranging from 868 ft. to 1,369 ft. in length. At each entrance to these tunnels there is a motor car indicator, which is controlled by circuits extending throughout the block in which the tunnel is located. Two levers, marked "exit" and "enter" are located on cases near the tunnel entrances. The motorcar operator, on instructions from the dispatcher when entering the block, operates the switch marked "enter." This checks that signals entering the block are at "stop."

If the block is clear, a white indicator light on the case will be illuminated, conveying authority for the motor car to proceed through the tunnel. After passing through the tunnel, the motor car operator must stop and operate the lever marked "exit" to release the signal system and restore it to its normal condition.

This project was constructed partly by signal and communications forces of the railroad, and partly under contract by R. H. Bouligny, Inc., Charlotte, N. C. The project was under jurisdiction of J. R. DePriest, superintendent communications and signals. J. E. Barker was general signal construction supervisor. Principal items of signaling equipment came from Union Switch & Signal division of Westinghouse Air Brake Company.

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BARS—carbon & alloy, hot rolled & cold finished
STRUCTURALS—channels, angles, beams, etc.
PLATES—sheared & U. M., Inland 4-Way Floor Plate
SHEETS—hot & cold rolled, many types and coatings
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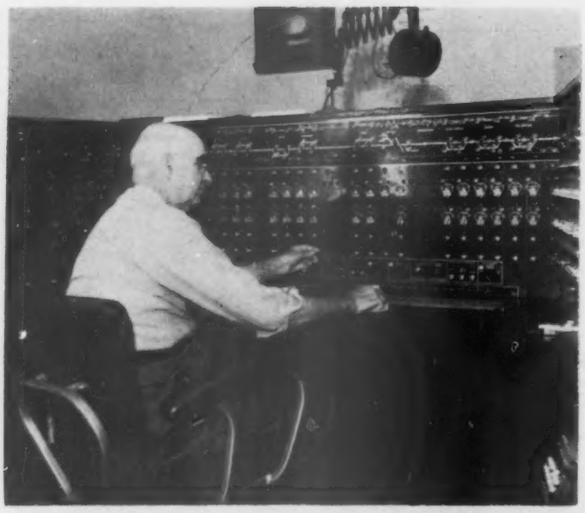

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Supply Trade

(*Continued from page* 18)
division. He succeeds **J. R. Smith,** who has been transferred to the Eddystone division at Philadelphia, where he will handle special assignments under direction of **Robert G. Tabors,** in charge of industrial products.

H. Philip Shean, sales representative in northeastern Pennsylvania of **Lewis-Shepard Products, Inc.,** Watertown, Mass., has been transferred to the Syracuse, N.Y., area, with headquarters at Syracuse.

W. A. Mayfield, formerly of **Swift & Co.,** is now associated with **General American Transportation Corporation** as consultant, at Chicago.

Oakite Products, Inc., New York, has announced the following changes in management organization: **H. Liggett Gray,** vice-president, elected second vice-president; **Frank L. Oldroyd,** general sales manager, industrial division, elected also vice-president; **Eustace Lingle** and **Van Dorn C. Smith,** vice-presidents; and **George M. Seib,** secretary.

Roy McCluskey, formerly a vice-president of **R. G. LeTourneau, Inc.,** has joined the **Caterpillar Tractor Company** as sales administrative assistant, to study product distribution and development of new dealers.

Charles A. Skog, formerly vice-president and general manager of the Grand Trunk Western-Canadian National, has been named railway sales representative of **Automotive Finishes, Inc.,** manufacturers of primers and enamels for rolling stock and structures, at Minneapolis.

E. S. Gunn has been appointed manager transportation sales for the New England district of the Apparatus Sales division of **General Electric Company,** at Boston.

Roger O. Bay, formerly sales manager of the automotive division of **Cleveland Pneumatic Tool Company,** has been appointed sales manager of the Tool division of **Bonney Forge & Tool Works,** Allentown, Pa.

G. R. Betts, manager of railroad sales of **Armco Drainage & Metal Products, Inc.,** has been appointed sales manager of the O'Neall division. He has been succeeded by **Herbert Clark, Jr.,** sales engineer, who becomes acting railroad sales manager. Mr. Betts joined Armco in 1922, entered sales work two years later, and in 1931 was transferred to the Lyle Culvert & Pipe Co., an Armco subsidiary. In 1940 he became associated with the Armco Railroad Sales Company as sales representative at Minneapolis; was transferred to the Chicago office in 1944, and in 1945 was appointed manager of railroad sales.

W. E. Bikle, assistant vice-president of the Standard Railway Equipment Manufacturing Company, who has been appointed general manager at Chicago.

L. C. Dobbrow and **J. T. Miller** have been appointed railroad sales and service representatives of the **Pennsylvania Salt Manufacturing Company.**

Richard C. Martin, in charge of the southern division of **Kelite Products, Inc.,** at Dallas, Tex., has been appointed national sales director, with headquarters at Los Angeles.

Separation of **Caterpillar Tractor Company** facilities in Peoria, Ill., into a General Offices group and a Peoria plant will become effective July 1. This organization change follows announcement of plans for building another plant and gradual rearrangement of certain facilities at Peoria to accommodate a broadened program of crawler tractor and engine manufacture.

OBITUARY

R. P. Carlton, president of the Minnesota Mining & Manufacturing Co., and a director of the Chicago, St. Paul, Minneapolis & Omaha since 1949, died June 17 at St. Paul.

Charles H. Caine, vice-president in charge of Midwest sales of the Cornell-Dubilier Electric Corporation, Plainfield, N.J., died in Chicago June 8.

Frank J. Cullen, president of the Cullen-Friestedt Company, died June 22 at his home in Oak Park, Ill., after a long illness.

Arthur J. Singer, 86, vice-president of the Youngstown Steel Door Company, died at his home in New York June 21.

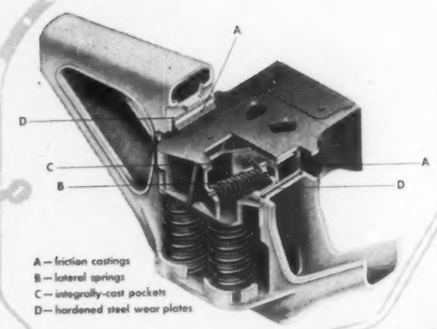
New Facilities

Chicago Roads Oppose South Side Terminal Plans

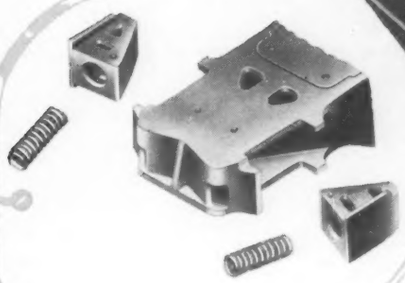
The so-called "Anderson Plan" for moving Chicago's Dearborn Street passenger station—considered as the first part of a larger program for realizing a new consolidated railroad passenger terminal for Chicago—was opposed by the Chicago & Western Indiana in re-

THE FIRST OF THREE new passenger stations, built by the Chicago, Indianapolis & Louisville, was dedicated at Monon, Ind., June 10, by Warren Buchanan, chairman of Indiana's Public Service Commission. The colorful ceremonies included a concert by the 60-piece Monon High School Band and distribution of over 1,000 of the road's "engineer's" caps. Later, the road will dedicate new stations at Lowell and Hammond.

BEFORE YOU SPECIFY ANY FREIGHT CAR TRUCK . . .



A — friction castings
B — lateral springs
C — integrally-cast pockets
D — hardened steel wear plates



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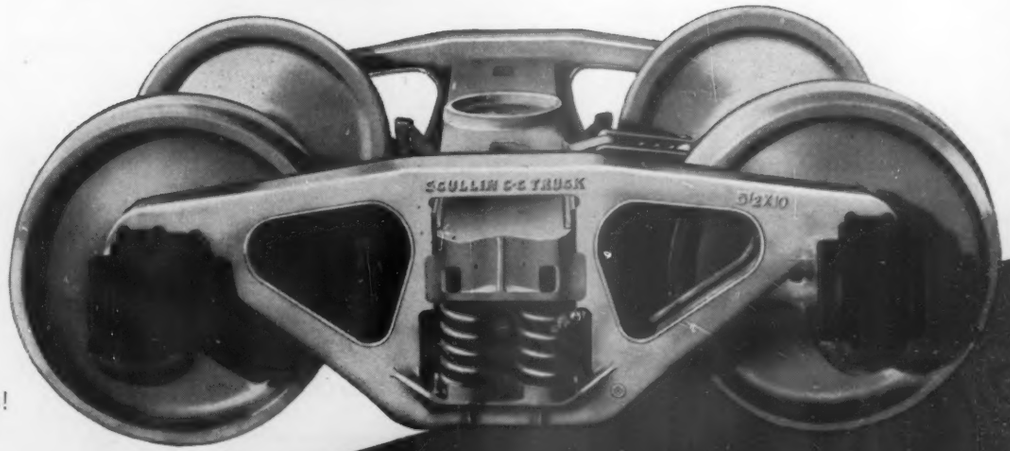

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STEEL CASTINGS MANUFACTURER

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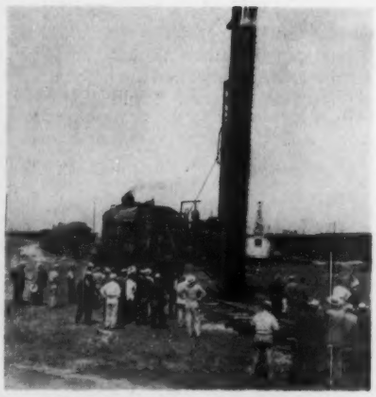


CONSTRUCTION OF THE SOUTHERN PACIFIC'S NEW HOUSTON HUMP YARD gets under way with the driving of 50-ft. steel pipe piling for conducting load tests. The new "push-button hump yard," described in *Railway Age* June 1, page 72, will cover more than 300 acres of ground; have 48 classification tracks with a capacity of 2,390 cars; 22 receiving and departure tracks; and 10 tracks for assembling local trains and terminal transfers. Work on the new $6-million facility is expected to require 18 months to complete.

cent hearings before the city council committee on railway terminals.

M. F. Stokes, president of the C&WI, said railroads comprising the "Dearborn Station group" could not afford to move under the Anderson plan (*Railway Age*, July 7, 1952, page 13). Mr. Stokes also stated that the C&WI's mortgage trustees had declared the plan "entirely impracticable" and one to which they "could not possibly accede."

The railroads are supporting the so-called "Gurley Plan" (*Railway Age*, February 11, 1950, page 39), which provides for relocating freight stations to provide 14 acres of land for development, and the opening of streets across tracks to relieve traffic congestion.

Chicago, Indianapolis & Louisville.—Plans have been completed for construction of a new $300,000 freight station to serve the Chicago area. The new facility—which will be fully mechanized—will be an important factor in the Monon's plans to maintain overnight service between Louisville and Chicago, with next morning delivery in both cities. The new freighthouse will be located adjacent to the South Hammond, Ind., yards—a site which was selected because of its proximity to main arterial highways giving quick access to all parts of Chicago, northern Illinois and northern Indiana. Construction is expected to start in July.

Illinois Central.—A contract for construction of a new passenger station at Rockford, Ill., has been awarded to G. A. Johnson & Son, Chicago, at an approximate cost of $112,000.

Pennsylvania. — See "PRR Expands Suburban Service," page 13.

Financial

Baltimore & Ohio.—*Acquisition.*—This road has applied to the I.C.C. for authority to acquire all properties of the Buffalo & Susquehanna, a wholly owned subsidiary. In a separate application, the B&S asked for authority to acquire all properties of the Wellsville, Coudersport & Pine Creek and the Addison & Susquehanna. The latter acquisition would be carried out first. Effect of this plan would be to eliminate three companies from the B&O corporate structure, resulting in tax savings and other "minor economies." Trackage owned by the three subsidiary roads totals 146.3 miles of main line and 46.1 miles of branch line in New York and Pennsylvania.

Cuba.—*Abandons Recapitalization Plan.*—This company has abandoned its proposed plan of recapitalization, under which income debentures and accrual certificates would have been substituted for preferred stock. Abandonment was the result of the fact that less than the required 70 per cent of outstanding 6 per cent non-cumulative preferred shares have been deposited under the plan (*Railway Age*, March 2, page 22).

Illinois Central.—*Acquisition.*—Division 4 of the I.C.C. has authorized this road to acquire all properties of the Canton, Aberdeen & Nashville, a wholly owned subsidiary. The Canton company will be dissolved. Its 87.9-mile line extends from Kosciusko, Miss., to Aberdeen.

St. Louis Merchants Bridge Terminal.—*Acquisition.*—The I.C.C. has authorized this company to acquire direct ownership of all facilities of the Madison, Illinois & St. Louis. The Madison company, a wholly owned subsidiary, will be dissolved. The move is designed to simplify the corporate structure of the Terminal Railroad Association of St. Louis, which owns all stock of Bridge Terminal (*Railway Age*, May 18, page 190).

St. Louis-San Francisco.—*Assumes Control of Building.*—The Frisco, through its wholly owned subsidiary, the 906 Olive Corporation, will assume ownership and control of the 13-story Frisco building in downtown St. Louis next December 15. The building, erected for the Frisco in 1906 and always rented by the railroad, will be acquired at a reported sale price of approximately $2 million. The Frisco currently occupies about 75 per cent of the floor space in the building.

Table of Selected Income and Balance-Sheet Items of Class I Steam Railways for February and two months of 1953 and 1952 appears on page 64.

Securities

Security Price Averages

	June 23	Prev. Week	Last Year
Average price of 20 representative railway stocks	64.46	61.65	62.98
Average price of 20 representative railway bonds	89.14	89.12	94.30

Dividends Declared

ALLEGHENY & WESTERN.—$3, semiannual, payable July 1 to holders of record June 20.

CAROLINA, CLINCHFIELD & OHIO.—$1.25, quarterly, payable July 20 to holders of record July 10.

CHICAGO GREAT WESTERN.—5% preferred, accumulated, $1.15, payable June 30 to holders of record June 26.

MASSAWIPPI VALLEY.—$3, semiannual, payable August 1 to holders of record July 1.

MISSOURI-KANSAS-TEXAS.—7% preferred, accumulated, $1.25, payable October 1 to holders of record September 16.

NORFOLK & WESTERN.—75¢, quarterly, payable September 10 to holders of record August 13; adjustment preferred, 25¢, quarterly, payable August 10 to holders of record July 16.

NORTHERN CENTRAL.—$2, semiannual, payable July 15 to holders of record June 30.

READING.—50¢, quarterly, payable August 13 to holders of record July 16.

RICHMOND, FREDERICKSBURG & POTOMAC.—common, 75¢; dividend obligation, 75¢, both payable July 1 to holders of record June 19.

WABASH.—$1.50, payable June 26 to holders of record June 19.

Railway Officers

EXECUTIVE

L. J. Benson, assistant to president of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, at Chicago, retired June 30. Mr. Benson joined the Milwaukee in 1906 as call boy; from 1907 to 1913 was a locomotive fireman and trainman on the La Crosse division, and in the latter year entered the railroad's police department. He became assistant to vice-president in 1945 and assistant to president in 1947.

Roy E. Barr, vice-president in charge of traffic of the ILLINOIS CENTRAL, at Chicago, will retire August 1. He will be succeeded by **Robert A. Trovillion,** assistant vice-president. Mr. Barr joined the IC in 1902 as stenographer in the general freight office at Chicago, and served in various positions there until 1908, when he was appointed traveling freight agent. In 1910 he became chief clerk in the coal traffic department, and in 1914 chief clerk in the general freight office. For 15 years, from 1917 to 1932, he

was out of railroad service, and held a number of sales and executive positions with lumber and coal companies in the Chicago area. In March 1932 he returned to the IC as general coal agent, advancing to coal traffic manager later

Roy E. Barr

that year. He became assistant traffic manager in 1935; freight traffic manager in 1939, and vice-president in 1942.

Mr. Trovillion began his IC career at St. Louis in 1906 as stenographer in the office of assistant general freight agent. After serving in the Army dur-

Robert A. Trovillion

ing World War I, he returned to the railroad as chief clerk in the general freight office, becoming assistant general freight agent in 1921 and general freight agent in 1935. Subsequent promotions were to assistant freight traffic manager in 1939; freight traffic manager in 1944; general traffic manager in 1945; and assistant vice-president, traffic, in 1951.

FINANCIAL, LEGAL & ACCOUNTING

Kenneth A. Carney, chief claim agent of the ILLINOIS CENTRAL at Chicago, has been granted a leave of absence to assume direction of the newly formed Claim section of the ASSOCIATION OF AMERICAN RAILROADS at that point. He has been succeeded as chief claim agent by **William R. Hovious,** general claim agent at Memphis.

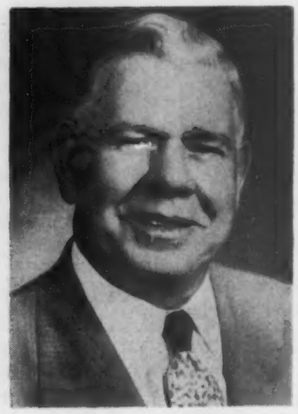
H. F. Harris, assistant freight claim agent of the ATLANTIC COAST LINE at Orlando, Fla., has been appointed freight claim agent at Wilmington, N.C.

W. P. Westphal, attorney for the GREAT NORTHERN at St. Paul, has been appointed assistant general solicitor at that point. He has been succeeded by **Donald E. Engle. James H. Mulally,** assistant general counsel at St. Paul, retired June 30. Mr. Mulally joined the GN in 1920 as attorney and in 1929 was appointed general attorney. He became assistant general counsel in 1945.

Paul Thomas, master mechanic of the PENNSYLVANIA's Southwestern division, has been appointed superintendent of methods and cost control at Chicago.

TRAFFIC

George W. Wood has retired as freight traffic manager—service of the CHESAPEAKE & OHIO at Cincinnati (*Railway Age,* May 11). Mr. Wood entered railway service in 1904 with the Kanawha & Michigan (C&O); and from 1912 to 1941 was successively soliciting freight agent, travel-



George W. Wood

ing freight agent, general agent, general traveling agent, general western freight agent, assistant general freight agent, and general through freight agent. In 1941 he was appointed freight traffic manager—sales and service at Cincinnati, and in 1947 became freight traffic manager—service at that point.

W. D. Miller, assistant general freight agent of the NORTHERN PACIFIC at Minneapolis, has been appointed general freight agent at Portland, Ore. He succeeds **S. W. Elmore,** who has been named assistant to western freight traffic manager—service and sales, at Seattle. **A. P. Kimmel,** assistant to general freight traffic manager—service and sales at St. Paul, succeeds Mr. Miller at Minneapolis, and **H. A. Shultz,** city freight agent there, succeeds Mr. Kimmel. Named as general agent, freight department, at Portland is **H. H. Happe,** commercial agent there.

H. J. Schroeder and **I. O. Lawrenz,** both assistant general freight agents—rates of the CHICAGO & NORTH WESTERN, have been appointed, respectively, assistant freight traffic manager—rates, and general freight agent —rates (*Railway Age,* May 25, page 30).

Mr. Lawrenz began his railroad career in 1920 with the Rock Island. He went to the North Western in 1925 as rate analyst, later serving as chief clerk in the office of general freight agent at Chicago. In 1952 he was promoted to assistant general freight agent—rates.

Mr. Schroeder joined the C&NW in 1916 as a clerk in the Ravenswood accounting offices. His subsequent service included positions as rate clerk, embargo clerk, chief clerk to assistant freight traffic manager, and chief clerk to freight traffic manager. In 1947 he was appointed assistant general freight agent—rates.

R. W. Cowles, traveling freight agent of the ANN ARBOR, has been appointed district freight agent, with headquarters as before at Portland, Ore. **H. P. Reule** has been named district freight agent at Seattle, Wash. The position of traveling freight agent at Seattle has been abolished.

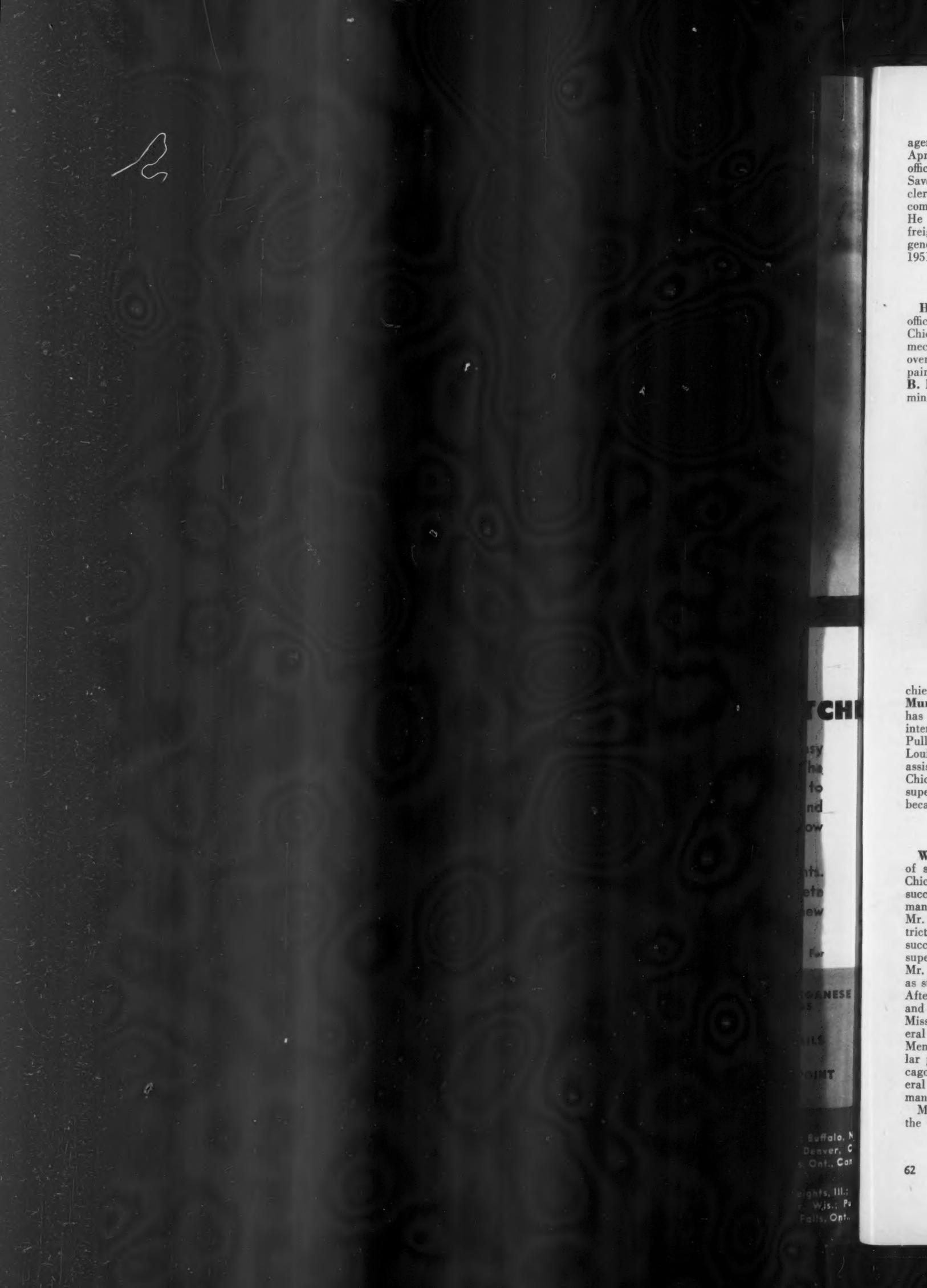
James C. Malone, general agent of the NEW YORK CENTRAL at Chicago, has been named division freight agent there. **Frank O. Stein,** assistant general agent, succeeds him as general agent.

Robert T. Payne has been appointed general agent of the UNION PACIFIC at Milwaukee, succeeding **Karl T. Mindemann,** who will retire June 30 under the company's pension plan, after 43 years of service.

Roy C. Pender has been appointed to the newly created position of assistant general freight agent of the SOUTHERN PACIFIC at Los Angeles. He was formerly chief clerk in charge of the rate adjustment bureau.

W. K. Clark, traveling passenger agent of the SOUTHERN PACIFIC at Houston, Tex., has been promoted to special assistant to passenger traffic manager at that point, succeeding **E. G. Germann,** who has retired.

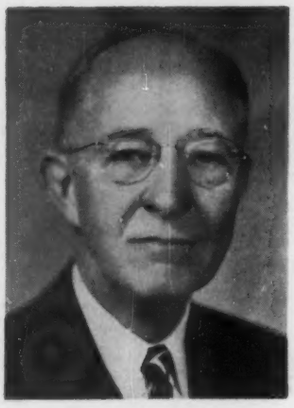
H. M. Croghan, general freight agent of the CENTRAL OF GEORGIA, has been appointed assistant freight traffic manager, with headquarters as before at Savannah, Ga. **E. E. Brown** succeeds Mr. Croghan as general freight



agent. Mr. Croghan joined the CofG April 16, 1924, as messenger in the office of division freight agent at Savannah and later served as rate clerk, assistant commerce clerk, chief commerce clerk and commerce agent. He was appointed assistant general freight agent in January 1950 and general freight agent in December 1951.

MECHANICAL

Harry B. Reed, chief maintenance officer of the PULLMAN COMPANY, at Chicago, has been appointed chief mechanical officer, with jurisdiction over Pullman engineering, testing, repair shop and maintenance functions. **B. N. Lewis,** supervisor personnel administration, has been named assistant



Harry B. Reed

chief mechanical officer, and **L. F. Munson,** mechanical superintendent, has been promoted to general superintendent of shops. Mr. Reed joined Pullman in 1910 as a linen clerk at St. Louis, and by 1924 had progressed to assistant superintendent of yards at Chicago. In 1942 he was advanced to superintendent of yards and in 1947 became chief maintenance officer.

PURCHASES & STORES

William S. Morehead, manager of stores of the ILLINOIS CENTRAL at Chicago, will retire June 30. He will be succeeded by **R. E. Godley,** assistant manager of stores. Named to succeed Mr. Godley is **Charles L. Foust,** district storekeeper, who will in turn be succeeded by **Albert G. Campbell,** supervisor of scrap and reclamation. Mr. Morehead joined the IC in 1902 as stenographer at Water Valley, Miss. After holding various positions there and at New Orleans and McComb, Miss., he was appointed assistant general storekeeper, Southern lines, at Memphis in 1913. He assumed a similar post on the Northern lines at Chicago in 1917; in 1934 was named general storekeeper, and was advanced to manager of stores in 1945.

Mr. Godley became associated with the IC in 1924 at Vicksburg, Miss., and subsequently worked as stockkeeper and general foreman at Memphis. In 1941 he was transferred to Chicago as a special clerk and later general stockkeeper, being named supervisor of scrap and reclamation in 1946 and assistant manager of stores in 1949.

Mr. Foust joined the IC as a laborer

R. E. Godley

at Memphis in 1927. He was later promoted to scrap foreman at McComb, and in 1948 to general foreman at Burnside shop, Chicago. In 1949 he was appointed supervisor of scrap and reclamation and in 1950, district storekeeper.

SPECIAL

James R. Brugger, director of publications of the NEW YORK CENTRAL at New York, has been appointed to the new position of assistant manager, public relations. **Theodore E. Applegate,** a business news writer for the Associated Press at New York, has been named director, news bureau, NYC, succeeding **Cecil G. Muldoon, Jr.,** who is returning to newspaper work with the Pittsburgh Press, but who will be also public relations representative of the PITTSBURGH & LAKE ERIE at Pittsburgh.

Don MacIver, business and financial editor of the Dallas Morning News, has been named assistant director of public relations of the MISSOURI-KANSAS-TEXAS at St. Louis, effective July 1.

OPERATING

Gilbert H. Kern, assistant to superintendent of the CHICAGO, INDIANAPOLIS & LOUISVILLE (MONON), has been appointed superintendent, effective July 1, with headquarters as before at Lafayette, Ind.

J. H. Blake, trainmaster of the ATCHISON, TOPEKA & SANTA FE at Carlsbad, N.M., has been named acting superintendent of the Pecos division at Clovis, succeeding **T. W. Goolsby,** who is on leave of absence.

L. R. Mitchell, trainmaster at San Angelo, Tex., has been appointed acting trainmaster at La Junta, Colo. He has been succeeded at San Angelo by **C. W. Herbert.**

W. F. Johnson, trainmaster of the CHICAGO & NORTH WESTERN at Proviso yard (Chicago), has been named superintendent of the Chicago Freight Terminals division (*Railway Age,* June 1). Mr. Johnson joined the North Western in 1920 as a brakeman, and subsequently worked as a conductor and as a car retarder operator at Proviso. In 1940 he was appointed a yardmaster there; in 1944 general yardmaster, and two years later trainmaster.

C. M. Amick, chief car distributor of the CHESAPEAKE & OHIO, at Huntington, W.Va., has been appointed to the newly created position of assistant superintendent freight transportation at Richmond, Va.

As reported in *Railway Age* June 1, **Ralph G. Fritch** has been appointed superintendent, Portland division, of the BOSTON & MAINE at Dover, N.H. Mr. Fritch started his railroad service with the B&M as a laborer in 1939 and advanced to student engineer,

Ralph G. Fritch

special apprentice, diesel inspector and assistant to superintendent of locomotive maintenance. He was appointed assistant trainmaster at Fitchburg, Mass., in 1949, becoming trainmaster there in 1950 and transferring to Dover in July 1952.

W. L. Wilson, assistant superintendent of the CANADIAN PACIFIC at Winnipeg, has been appointed acting superintendent at that point, succeeding **F. J. Fryer,** who has been assigned to special duties.

Gordon A. McLachlan has been appointed superintendent of the Terminal division of the RAILWAY EXPRESS AGENCY at Chicago, effective July 1. He was formerly supervisor of transportation at Chicago.

The title of **H. P. Hannan,** transportation assistant to vice-president of

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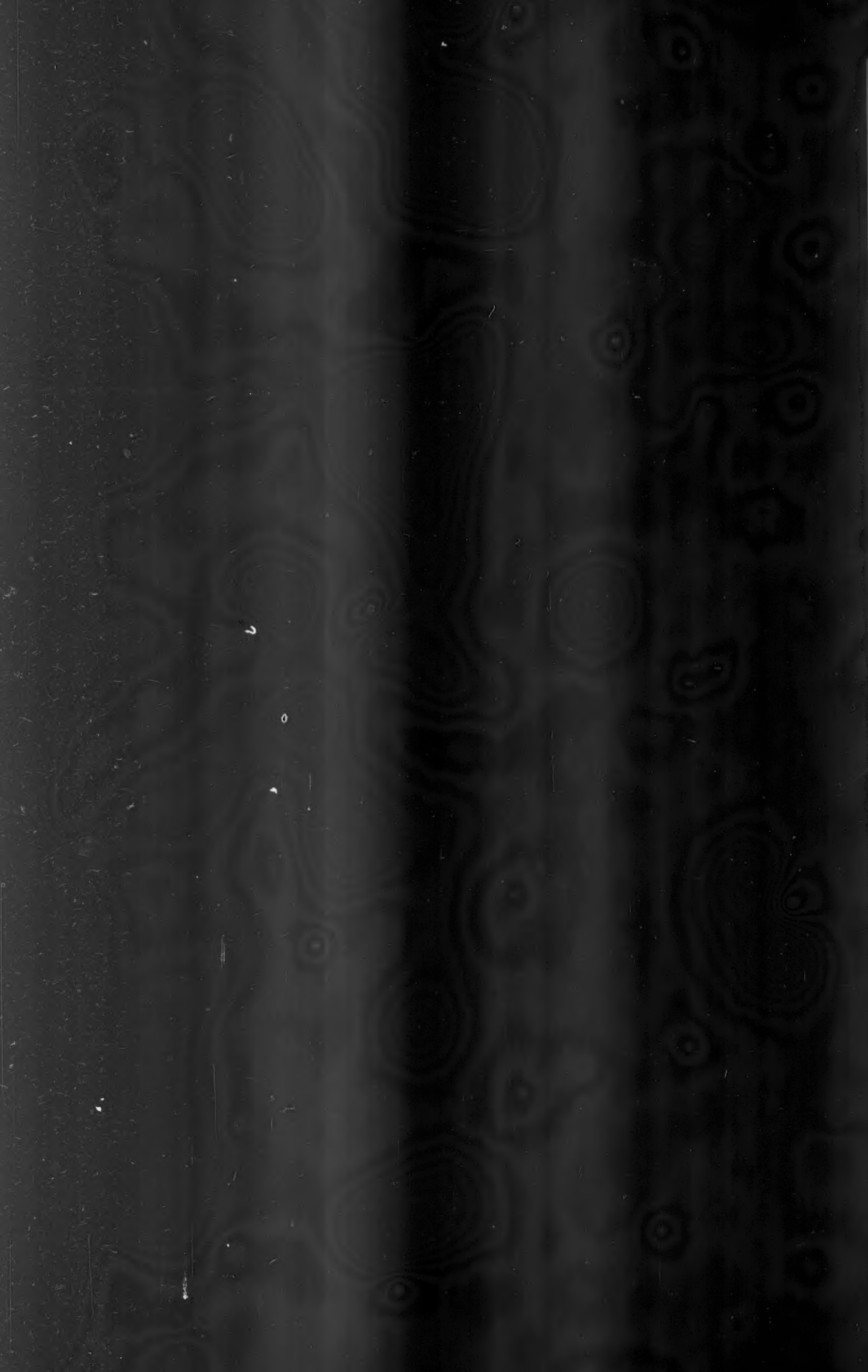


the NEW YORK CENTRAL at Chicago, has been changed to freight service manager, and the title of **R. W. Drommerhausen,** supervisor of transportation bureau, has been changed to supervisor of freight service bureau at Chicago.

The office of **Edward J. Gibbons,** general manager of the CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS, has been moved from 230 E. Ninth street, Cincinnati, to 105 S. Meridian street, Indianapolis 25, Ind. There are approximately 25 other staff members and office employees involved in the move. No procedures affecting the public in either freight or passenger traffic operations at Cincinnati are to be changed. The move to Indianapolis, a more central location for the Big Four division of the NEW YORK CENTRAL SYSTEM, is part of the reorganization plan for the road's operating department.

Harry J. Page, trainmaster, BOSTON & MAINE, has been appointed superintendent, Terminal division, with headquarters as before at Boston.

As *Railway Age* announced May 25, **Lewis A. Collins,** general manager of the UNION PACIFIC at Portland, Ore., has retired. Named as general superintendent was **Angus McAllister,** superintendent, who has been succeeded by **Jerry G. Kimmell,** assistant superintendent. Entering railway service in 1911 as a telegrapher on the UP, Mr. Collins held successive positions as dispatcher, chief dispatcher, trainmaster, and assistant superintendent. In 1943 he was appointed superintendent, Oregon division; in 1945 general superintendent, Northwestern district; and in 1946 acting general manager and later general manager.

Mr. McAllister began his railroad

Lewis A. Collins

Angus McAllister

Jerry G. Kimmell

Selected Income and Balance-Sheet Items of Class I Steam Railways in the United States

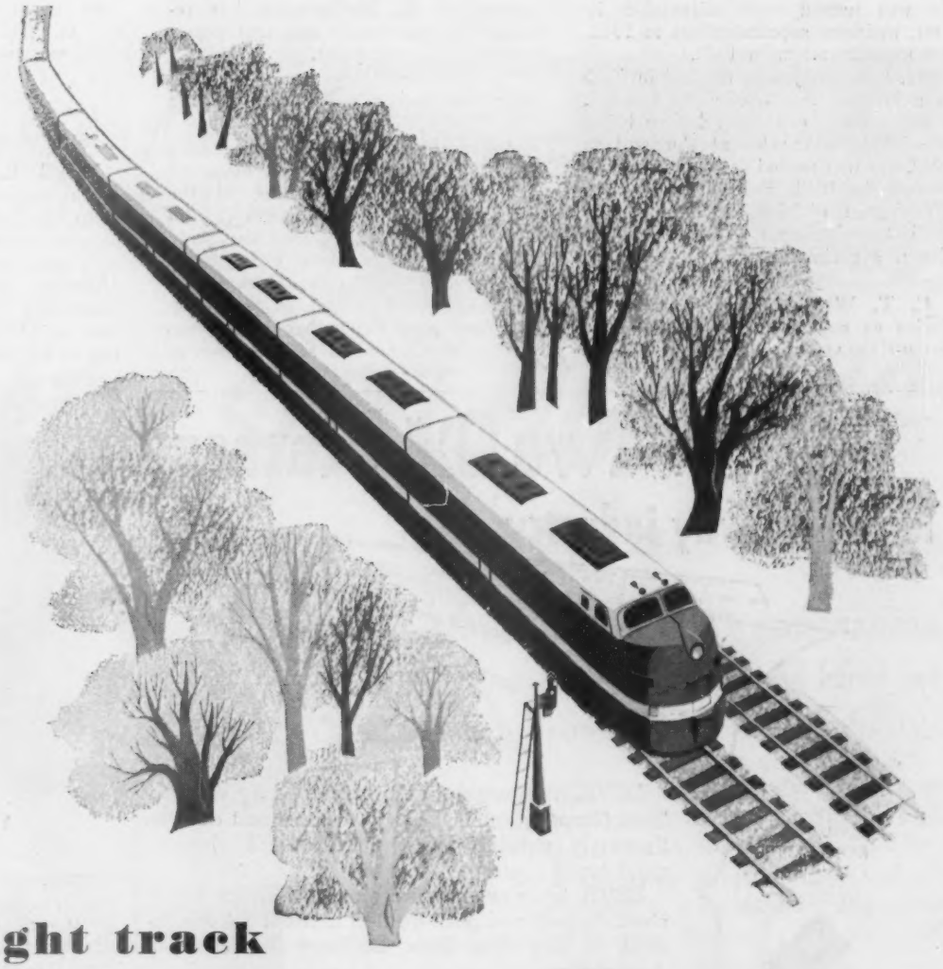
Compiled from 126 reports (Form IBS) representing 131 steam railways

(Switching and Terminal Companies Not Included)

Income Items	United States For the Month of February 1953	1952	For the two months of 1953	1952
1. Net railway operating income	$77,799,925	$75,951,620	$157,874,872	$142,130,416
2. Other income	18,078,257	16,087,475	36,311,294	33,898,065
3. Total income	95,878,182	92,039,095	194,186,166	176,028,481
4. Miscellaneous deductions from income	3,818,626	4,334,922	8,187,947	8,804,378
5. Income available for fixed charges	92,059,556	87,704,173	185,998,219	167,224,103
6. Fixed charges:				
6–01. Rent for leased roads and equipment	6,106,259	6,480,898	12,345,673	13,031,373
6–02. Interest deductions[1]	26,982,976	26,300,777	54,026,535	52,507,825
6–03. Amortization of discount on funded debt	226,210	258,699	465,030	489,461
6–04. Total fixed charges	33,315,445	33,040,374	66,837,238	66,028,659
7. Income after fixed charges	58,744,111	54,663,799	119,160,981	101,195,444
8. Other deductions	2,800,627	2,910,608	5,622,967	5,839,983
9. Net income	55,943,484	51,753,191	113,538,014	95,355,461
10. Depreciation (Way and structures and Equipment)	40,592,924	38,858,314	81,469,377	77,772,588
11. Federal income taxes	44,393,072	52,445,157	93,204,302	98,762,472
12. Dividend appropriations:				
12–01. On common stock	25,101,575	28,196,207	38,779,943	33,665,913
12–02. On preferred stock	18,893,363	16,419,143	26,134,255	23,505,801
Ratio of income to fixed charges (Item 5 ÷6—04)	2.76	2.65	2.78	2.53

Selected Expenditure and Asset Items	United States Balance at end of February 1953	1952
17. Expenditures (gross) for additions and betterments—Road	$49,374,822	$49,096,746
18. Expenditures (gross) for additions and betterments—Equipment	136,404,199	187,571,417
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	463,619,448	476,821,465
20. Other unadjusted debits	84,157,328	88,239,456
21. Cash	1,001,629,703	897,724,946
22. Temporary cash investments	1,063,008,994	908,137,454
23. Special deposits	93,736,390	71,535,264
24. Loans and bills receivable	1,091,933	1,387,493
25. Traffic and car-service balances—Dr.	58,632,290	57,362,531
26. Net balance receivable from agents and conductors	178,933,601	167,827,354
27. Miscellaneous accounts receivable	376,373,806	472,157,956
28. Materials and supplies	850,266,969	930,983,532
29. Interest and dividends receivable	18,406,888	16,975,677
30. Accrued accounts receivable	208,286,564	221,102,132
31. Other current assets	41,913,669	36,550,616
32. Total current assets (items 21 to 31)	3,892,280,807	3,781,744,955
Selected Liability Items		
40. Funded debt maturing within 6 months[2]	$159,685,219	$186,359,381
41. Loans and bills payable[3]	2,437,972	2,930,000
42. Traffic and car-service balances—Cr.	117,844,202	105,608,701
43. Audited accounts and wages payable	540,709,577	532,335,434
44. Miscellaneous accounts payable	203,269,361	192,422,572
45. Interest matured unpaid	29,926,599	29,702,413
46. Dividends matured unpaid	10,425,259	12,163,637
47. Unmatured interest accrued	96,843,984	96,783,466
48. Unmatured dividends declared	65,382,013	58,751,185
49. Accrued accounts payable	219,267,284	275,639,988
50. Taxes accrued	1,011,945,084	977,386,585
51. Other current liabilities	98,482,604	88,894,277
52. Total current liabilities (items 41 to 51)	2,396,533,939	2,372,618,258
53. Analysis of taxes accrued:		
53–01. U. S. Government taxes	841,528,204	819,044,330
53–02. Other than U. S. Government taxes	170,416,880	158,342,253
54. Other unadjusted credits	252,958,224	286,605,656

[1] Represents accruals, including the amount in defaults.
[2] Includes payments of principal of long-term debt (other than long-term debt in default) which becomes due within six months after close of month of report.
[3] Includes obligations which mature not more than one year after date of issue.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission.
Subject to revision.



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It's true . . . literally true . . . that Harrison radiators and oil coolers have played an important part in putting Diesel locomotives on the right track to greater earning power . . . by increasing their availability. For Harrison, with an engineering know-how acquired over a period of forty years, has developed water and oil-cooling equipment to highest levels of efficiency. In railroad circles, *Harrison-cooled* Diesels are known as *working, earning* locomotives.

HARRISON RADIATOR DIVISION

GENERAL MOTORS CORPORATION LOCKPORT, NEW YORK

HARRISON

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career in 1903, joining the UP in 1911. He was named chief dispatcher in 1941, assistant superintendent in 1942, and superintendent in 1945.

Mr. Kimmell joined the UP in 1910 as a laborer, and worked as fireman, brakeman and conductor before being appointed trainmaster at Portland in 1942. He was named assistant superintendent in 1943, and superintendent, Washington division, at Spokane, in 1945, transferring to Portland as assistant superintendent.

C. T. Williams has resumed his duties as superintendent of the MISSOURI-KANSAS-TEXAS' Southern division at Muskogee, Okla. Acting Superintendent **A. B. McCormick** has resumed his position as assistant superintendent at that point.

ENGINEERING

As reported in *Railway Age* June 15, **R. H. Beeder** has been promoted to assistant chief engineer of the ATCHISON, TOPEKA & SANTA FE at Chicago. Mr. Beeder joined the Santa Fe in 1920 at La Junta, Colo., being employed in various capacities in the engineering department of the Western lines until September 1943, when he was transferred to Eastern lines as division engineer at Emporia, Kan. In 1948 he was appointed district engineer and in 1949 was named assistant to chief engineer—system.

SIGNALING & COMMUNICATIONS

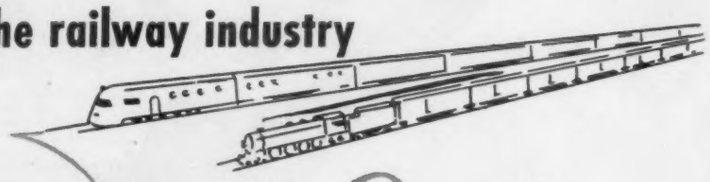
Virgil E. Glosup, principal assistant engineer of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, has been named assistant chief engineer, signals and communications, at Chicago (*Railway Age*, May 18). Mr. Glosup joined the Milwaukee in 1928 as rodman at Chicago. In 1942, after working as instrumentman at Savanna, Ill., Aberdeen, S.D., and Miles City, Mont., he was appointed assistant engineer at Butte. He was then, successively, division engineer at Miles City; principal assistant engineer, Lines West, at Seattle, and, since last February, principal assistant engineer at Chicago.

Virgil E. Glosup

CANADIAN NATIONAL TELEGRAPHS has moved its main Montreal office from St. Francis Xavier street to the new Bonaventure office building.

H. T. Fleisher, who has been named assistant chief engineer—communications and signals of the Chicago & North Western, at Chicago, as *Railway Age* announced June 1.

Two Old Names
in the railway industry



Devil

DEVIL
RAIL FLATTER

SLUG DEVIL
DOUBLE FACE
BLACKSMITH SLEDGE

DEVIL alloy steel tools, introduced by Warren Tool Corporation in 1922, are the result of continuously striving for improvement in forged steel hand tools.

DEVIL tools are special electric furnace alloy steel, forged and heat treated to meet the standards of the American Railway Engineering Association.

Warren Tool pioneered the use of alloy steels in forged hand tools . . . they're still the leaders. Ask for DEVIL tools when you want the best.

•

WARREN-TEED

RAIL TONGS

DOUBLE END
TRACK WRENCH

WARREN-TEED railway maintenance tools are well known by railroad men who have found through the years that "Warren-Teed" stands for high quality.

They are made of special open hearth carbon steel. They are forged and heat treated to A.R.E.A. specifications. Faces and bits on all striking and cutting tools are highly polished.

Warren Tool Corporation is maintaining its policy of constantly raising the quality of forged hand tools. Look to the leader when specifying railway track tools.

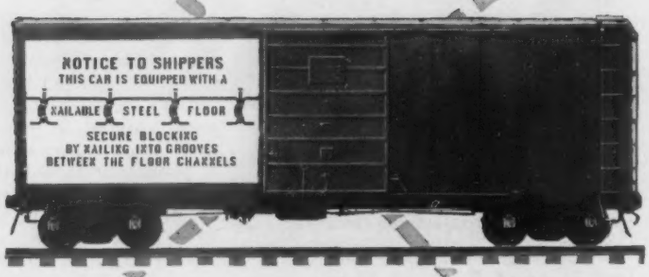
WARREN TOOL CORPORATION

Manufacturers of Warren-Teed and Devil Railway Tools

General Offices . . . Warren, Ohio

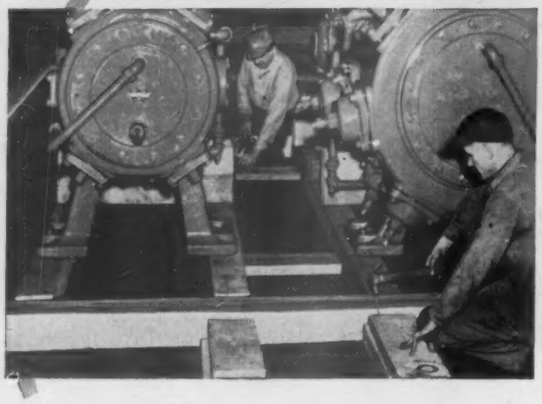
Export Division . 30 Church St., New York 7, N. Y.

New Yesterday . . .
Established Today



NAILABLE STEEL FLOORING

The Standard of Tomorrow



Made from tough N-A-X HIGH-TENSILE steel, N-S-F carries every kind of load — improves car availability.

Time was, not so long ago, when NAILABLE STEEL FLOORING was a novelty—something entirely new and different in freight cars. Today, N-S-F has proved its versatility and value in thousands of applications. And for tomorrow—all signs point to N-S-F becoming the standard for all cars requiring flat floors.

Why? Simply because N-S-F does a better job for railroads and shippers alike. NAILABLE STEEL FLOORING withstands all types of loading—lift truck . . . clamshell . . . magnet. It carries blocked and skidded loads, as well as bulk freight, with maximum security—makes every gondola a double-duty car.

To lengthen car floor life . . . to cut freight damage claims . . . to improve revenue car mileage—use NAILABLE STEEL FLOORING, the standard of tomorrow.

NEW APPLICATIONS

METAL GRAIN STRIPS—to make boxcars leak- and vermin-proof.
FLAT CARS—new hold-down features for greater safety.
REFRIGERATOR FLOOR RACKS—eliminate maintenance . . . expand usability.
DOOR POST SECTION—to increase strength . . . eliminate nailing damage.

See new N-S-F applications, listed at right, in cars at our track exhibit and in our space #R-1 at the A.A.R. Convention, Atlantic City, June 22-27.

GREAT LAKES STEEL CORPORATION
STEEL FLOOR DIVISION Ecorse, Detroit 29, Mich.

NATIONAL STEEL CORPORATION

53-SF-5 PATENTS PENDING

SALES REPRESENTATIVES IN:

CHICAGO, PHILADELPHIA, ST. LOUIS, ATLANTA, OMAHA, DENVER, SAN FRANCISCO, MONTREAL AND NEW YORK

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Current Publications

PAMPHLETS

Concrete for Railways. 15 pages, illustrations. Portland Cement Association, 33 W. Grand ave., Chicago 10. Free.

A pamphlet containing articles on short courses in quality concrete for railroad men, how the Virginian reduces bridge maintenance costs with shotcrete, methods of measuring air in air-entrained concrete, and the pressure grouting program on the SAL.

Proceedings of Wood Symposium; One Hundred Years of Engineering Progress with Wood. 111 pages, illustrations. Timber Engineering Company, 1319 18th st., N. W., Washington 6, D. C. Free.

A symposium on 100 years of engineering progress with wood was held at the Centennial of Engineering Convocation, September 3-13, 1952, in Chicago. Valuable contributions to the art and science of engineering in wood were featured in papers and discussions presented by eminent authorities. A permanent record of these informative presentations is made available to engineers, architects and students by the Timber Engineering Company, in this publication of the symposium proceedings. Among the papers presented was one entitled "100 Years of Engineering Progress with Wood on Railroads," by H. Austill, formerly chief engineer of the Terminal Railroad Association of St. Louis.

Proceedings, Fourth Regional Transportation Conference, (Sponsored by the Chamber of Commerce of the United States with the cooperation of the Minneapolis Chamber of Commerce and the Minneapolis Traffic Association). 76 pages. Chamber of Commerce of the U. S., Washington 6, D. C. $1.

These conferences are designed to acquaint those attending with current transportation events both in Washington and throughout the nation, to make better known the policies of the national chamber in the transportation field, to provide an opportunity for various transport interests to discuss timely and important questions, and to furnish the chamber's Transportation and Communication Committee with information and suggestions for future use in developing policy on vital national transportation issues. Subjects discussed at this conference were the role of the U. S. Department of Commerce in transportation, federal aids to transportation, and is there too much transport regulation? Considerable discussion also took place on federal aid, subsidies and user charges, and the long-and-short-haul clause.

Power Cranes, Shovels and Draglines—Attachments, Traction and Operation. 60 pages, drawings. Power Crane & Shovel Association, 74 Trinity place, New York 6. $1.

Identified as Technical Bulletin No. 4, this covers available front-end attachments which may be used with power shovels, their application, and effective use of these attachments with proper positioning of the basic unit for specific jobs encountered in the field. Preceding booklets in the series cover functional design, job application and job analysis of power cranes and shovels; operating cost guide of power cranes and shovels; and proper sizing of excavators and hauling equipment.

Regulations on Weight of Motor Trucks; Problems Illustrated by Wisconsin's Experience in Hauling Fluid Dairy Products, by L. John Kutish. 49 pages. Bureau of Agricultural Economics, United States Department of Agriculture, and College of Agriculture, University of Wisconsin. Available from the Government Printing Office, Washington 25, D. C. 25 cents.

This case study is intended to help marketing economists and others to understand better the complex nature of problems involved in economics of highway preservation. It considers some of the problems as illustrated by Wisconsin's experience in connection with the hauling of fluid dairy products, and it is concerned entirely with restrictions on weight of trucks and

Your maintenance forces can apply this tough Mule-Hide

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Application cost is low because your own maintenance crew can do the work without special tools.

A tough, weatherproof, built-up roof that outlasts old-fashioned hot-mopped roofs. Its long life reduces your maintenance costs. Proved in use on railroad buildings for over thirty years.

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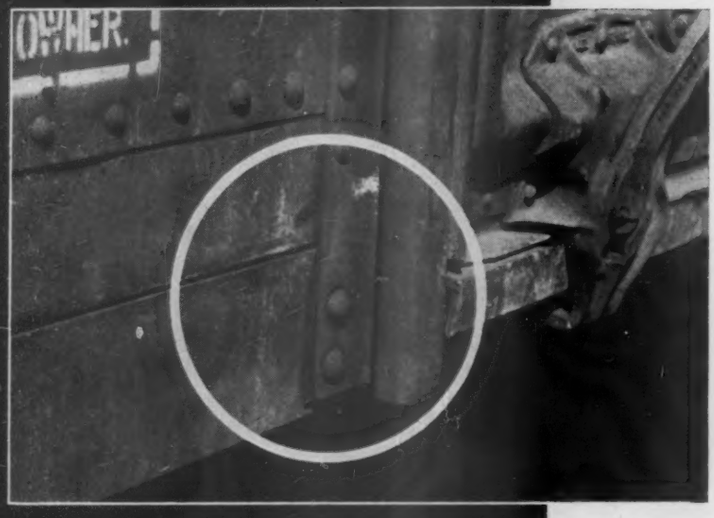
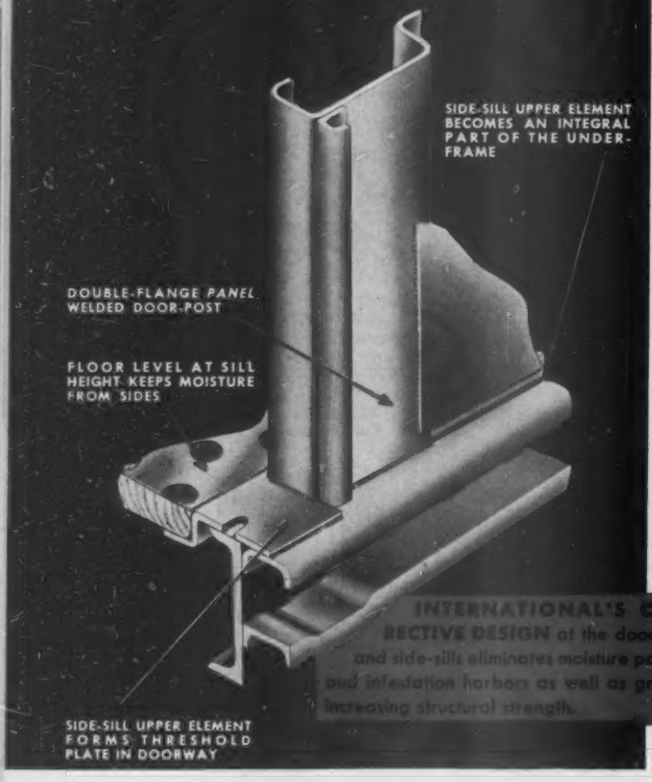
NEW PRECISION IN FREIGHT CAR CONSTRUCTION



Fracture and Progressive Separation at Door Post.

SCHEDULES GET FASTER AND FASTER...


SIDE-SILL UPPER ELEMENT BECOMES AN INTEGRAL PART OF THE UNDER-FRAME
DOUBLE-FLANGE PANEL WELDED DOOR-POST
FLOOR LEVEL AT SILL HEIGHT KEEPS MOISTURE FROM SIDES
INTERNATIONAL'S CORRECTIVE DESIGN at the door-post and side-sills eliminates moisture pockets and infestation harbors as well as greatly increasing structural strength.
SIDE-SILL UPPER ELEMENT FORMS THRESHOLD PLATE IN DOORWAY

NO ONE CONSIDERS HOLDING A SCHEDULE DOWN TO MATCH OUT-DATED CARS—*THEY EXPECT CAR DESIGN AND CONSTRUCTION TO MATCH TODAY'S PACE!*

Progress is impatient—it has no use for those who lag behind. PROGRESS IS JUST WHAT THE NAME IMPLIES—and it *will* keep moving forward with a relentless pace. The only solution is to *keep moving with it. International Steel's new precision* in design and construction is staying a step ahead! Cars and components such as sides, underframes, doors, etc., designed or constructed by *International will never hold down a schedule*—nor will they be out of service for repairs due to inadequate design or out-dated construction! *An International car is on the line . . . all the time!*

INTERNATIONAL STEEL COMPANY RAILWAY DIVISION
EVANSVILLE 7, INDIANA

Builders report plywood speeds car construction by up to 20 per cent

THIS refrigerator-freight car was built in 20 per cent fewer man hours because it is constructed entirely of fir plywood —siding, lining, bunkers and bulkheads.

Lower cost through time and labor savings is but one of the advantages you get with these modern real wood building panels. Plywood is tough. Cross-lamination makes it splitproof, puncture-proof. Large, light panels reduce dead weight...permit tight, draft-free construction. For free catalog, "Plywood Gets The Highball," write Douglas Fir Plywood Association, Tacoma 2, Washington.

Fir Plywood

Industry trademarks are your guide, guard and assurance of DFPA quality-tested plywood

Fir plywood is made in two types. **1.** *Interior-type* for indoor or structural uses; **2.** *Exterior-type* for uses exposed to water or weather; EXT-DFPA on panel edge means 100% waterproof glue. Grades within each type meet exact use needs.

EXT-DFPA

PlyShield is the "good one side" grade for siding, lining and other jobs where only one side of the panel will be in view in the finished job.

EXTERIOR FIR PLYWOOD
PLYSHIELD
DFPA INSPECTED
EXT-DFPA

SPECIFY DFPA INSPECTED PLYWOOD

their application to a part of the dairy industry's transportation system. The first part of the report contains a summary of some of the research and experience that form the basis of the more common types of weight limitations on highway vehicles. The second part considers the role of truck transportation in the marketing of Wisconsin fluid dairy products, the history of weight restrictions on trucks in Wisconsin, and the effect of the law's application to trucks hauling fluid dairy products.

Revolution on Rails. 27 pages, illustrations. Budd Company, Philadelphia 32, Pa. Free.

In this handsome brochure, Budd publishes the experiences of various railroads with RDC cars. Comments cover operations on the New York Central, the Michigan Central, the Baltimore & Ohio, the Western Pacific, the Boston & Albany, and the New Haven. It also includes a table listing companies using RDC's, points between which they are used, route miles, daily train-miles, and number of cars in use.

The Port of New York; The Harbor of New York and New Jersey, 1952. 68 pages, illustrations, maps. Port of New York Authority, 111 Eighth ave., New York 11. Free.

This beautifully produced brochure tells the story of transportation at the world's greatest port. It describes graphically what makes the port attractive to shippers all over the world. It compares this huge urban area to a great freight platform over which the goods of the world are handled, and it tells something of the Port of New York of tomorrow.

American Railroads; Their Growth and Development. 32 pages, illustrations, maps. Association of American Railroads, Transportation bldg., Washington 6, D.C. Free.

The latest edition of this pamphlet reviews briefly the beginnings of railway development; land grants; the increase in capacity of railway plant; railway associations; adoption of standard time; rail development; evolution of locomotives; freight and passenger car improvements; and war activities of the railroads. Development and extension of railway mileage by decades is shown in a series of maps, and another map shows how railroads serve the population of the United States.

Statistics of Class I Motor Carriers for the Year Ended December 31, 1950. 91 pages. Prepared by Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Available from Government Printing Office, Washington 25, D.C. $1.

Contains financial and operating statistics of motor carriers of property and passengers filing annual reports with the I.C.C.

Compare. 19 pages, illustrations. Canadian National Railways, Public Relations department, 360 McGill st., Montreal. Free.

Few people — railroaders among them—realize or are able to grasp what it costs to run a railway. The costs are enormous. Among other things, equipment is expensive. Through this booklet, the CNR hopes to bring some of these costs home, clearly and simply, by comparing them with prices of other things known and used in everyday life. The cost of a two-unit diesel locomotive is compared with the number of automobiles that could be purchased for the same amount of money; the cost of a dining car with the cost of an apartment house; the cost of a mile of double track with the cost of a two-lane highway, etc. For a reproduction of typical pages, see *Railway Age*, June 8.

ATLAS

Handy Railroad Atlas of the United States. 50 pages. Rand McNally & Co., 111 Eighth ave., New York 11. $2.50.

Contains a railroad map of the United States and of each of the 48 states. These maps show all railroads and interurban lines, railroad names and mileages, and principal cities, towns and junction points. The atlas also contains a list of railroads with their abbreviations.

COMFORTABLE
and so very much more

Hotel Cleveland offers a warm and friendly hospitality . . . convenient, too . . . located in the heart of Cleveland next door to Union Passenger Terminal.

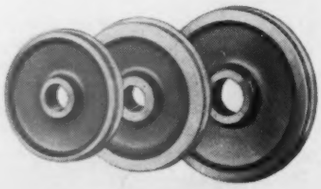
CLEVELAND, OHIO

OTHER SONNABEND OPERATED HOTELS
CHICAGO, Edgewater Beach Hotel
BOSTON, The Somerset, The Shelton
NEW YORK CITY, Ritz Tower
RESORTS
Whitehall, Palm Beach, Fla.
Samoset, Rockland, Me.

"Pedigreed" blocks

for Edgewater ROLLED STEEL Wheels

Every block from which an Edgewater Rolled Steel Wheel is made carries a serial number that identifies the open hearth furnace heat from which it was made. This identification is carried through all succeeding processes, so the complete history of every Edgewater wheel is a matter of complete record. This "pedigree" enables us to maintain and improve the quality of Edgewater wheels.



E **Edgewater Steel Company**

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PITTSBURGH 30, PENNA.

Ingots are bottom-poured under carefully controlled conditions.

After cooling, ingots are "sliced" into blocks, which are inspected, weighed and individually numbered.

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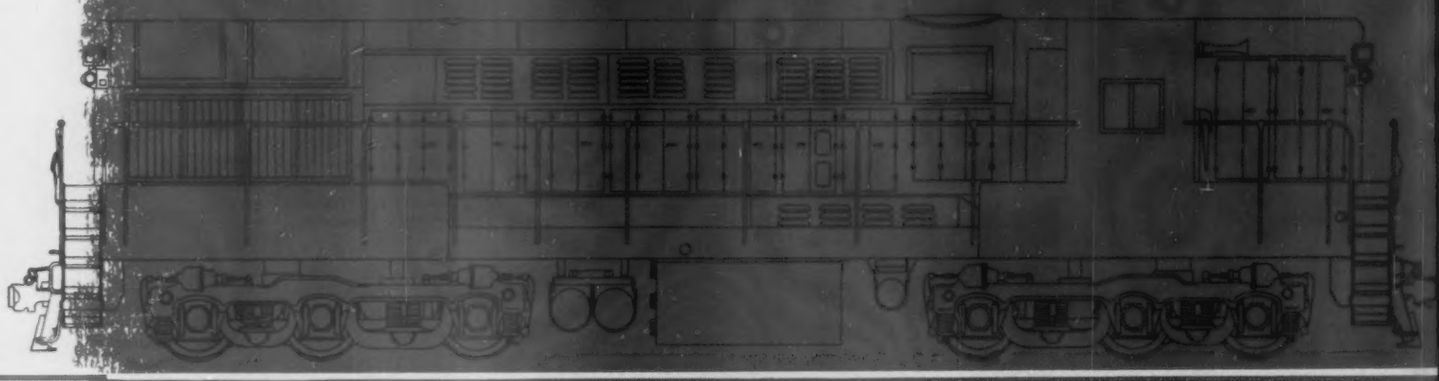
..one basic motive power unit

this is the Fairbanks-Morse

Train Master

the most useful locomotive ever built!



TRAIN MASTER *specifications*

MODEL ..... H24-66, 2400 H.P. Road Locomotive

TYPE ..... Whyte Symbol 0-6-6-0
AAR Symbol C-C

EQUIPMENT ..... 1-12 Cylinder Fairbanks-Morse Opposed-Piston Model 38D8-⅛

6-Heavy-Duty Traction Motors

4500 lb/hr Capacity Steam Generator

Roller Bearings 6½" x 12"

MAJOR DIMENSIONS .....
- Over-all length inside knuckles ..... 66' 0"
- Over-all width ..... 10' 3¼"
- Over-all height above rail ..... 15' 0"
- Width of power plant compartments ..... 7' 0"
- Wheelbase each truck ..... 13' 0"
- Wheelbase total locomotive ..... 49' 4"
- Distance between truck centers ..... 41' 6"
- Wheel diameter ..... 42"

SUPPLIES .....
- Fuel Oil ..... 1800 gallons
- Lubricating Oil ..... 385 gallons
- Engine Cooling Water ..... 250 gallons
- Train Heating Water ..... 2400 gallons
- Sand ..... 48 cu. ft.

WEIGHTS .....
- Total fully loaded ..... 375,000 lbs.
- Total on drivers ..... 375,000 lbs.
- Per axle ..... 62,500 lbs.

PERFORMANCE .....
- Starting Tractive Effort at 30% Adhesion .. 112,500 lbs.

Maximum Continuous Tractive Effort — Pounds
- Gear Ratio 68:15 (Max. Speed 65 MPH) 78,750
- Gear Ratio 63:15 (Max. Speed 70 MPH) 72,900
- Gear Ratio 62:17 (Max. Speed 80 MPH) 63,300

- Dynamic Brake Capacity at Rail ..... 3,000 H.P.
- Minimum radius of curvature ..... 212' (27°)
- Minimum radius of curvature, locomotive coupled to AAR 40' 6" freight car ..... 273' (21°)

FAIRBANKS-MORSE

a name worth remembering when you want the best

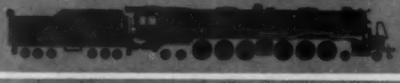
DIESEL LOCOMOTIVES • ELECTRICAL MACHINERY • PUMPS • SCALES • RAIL CARS

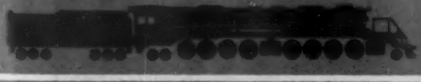
Yesterday

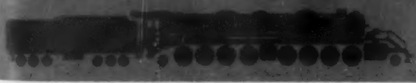
today

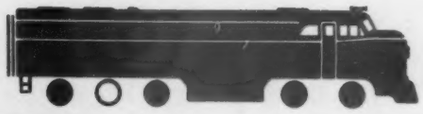
..custom-designed steam power for each railroading job

..diesel motive power designed for a large number of jobs



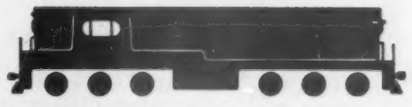




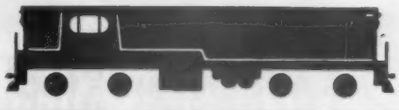


Road Diesel—
2400 Horsepower Passenger Locomotive

Road Diesel—
1600 Horsepower Freight Locomotive



Road Switcher—
1600 Horsepower Road Switching Locomotive



Road Switcher—
1600 Horsepower Road Switching Locomotive

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NOW! Get the Book That Protects the Money You Invest in Diesels

DIESEL-ELECTRIC LOCOMOTIVE HANDBOOK

By GEORGE F. McGOWAN Technical Consultant

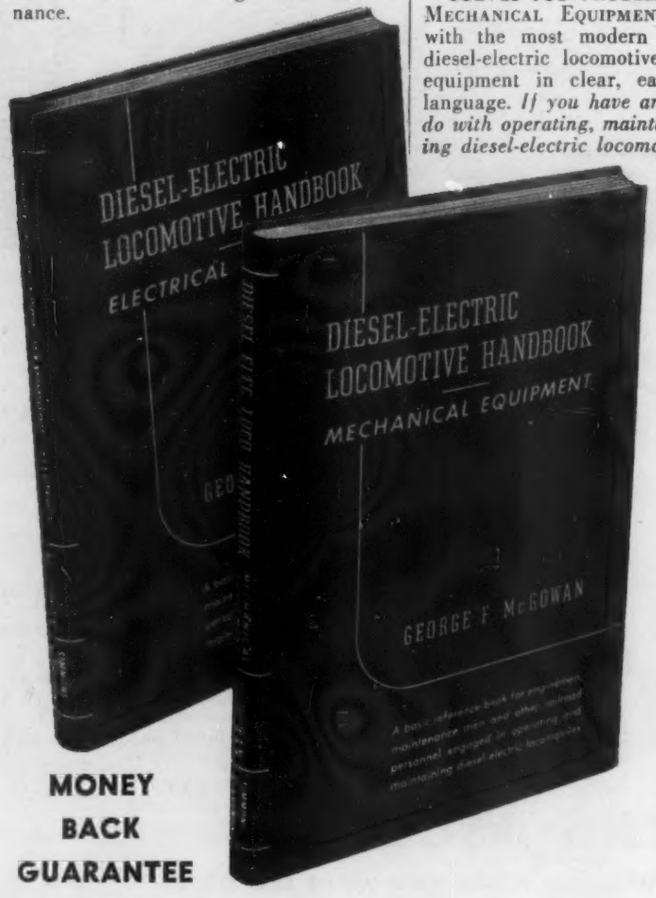
SEND TODAY for this great new book! Packed with photos and diagrams, it brings you up-to-the-minute facts — *the latest available* on diesel-electric locomotives and equipment.

Here is everything you need and want to know—*written from the viewpoints of the men in the cab and the shop*—by an experienced railroad man—*all checked and approved by the leading locomotive builders.*

For your convenience this handbook is sold separately in two volumes: *Mechanical Equipment and Electrical Equipment.* Read the descriptions that follow and you'll agree: *Here is essential information you cannot afford to be without!*

MECHANICAL EQUIPMENT

Everything necessary to complete understanding of diesel-electric locomotives is included—how diesel-electric locomotives are constructed, the reasons behind their design, proper operating methods, things that can go wrong with them, "trouble-shooting," and effective servicing and maintenance.



MONEY BACK GUARANTEE

GIVES YOU DETAILS OF EACH PART

Among the chapters are: The Development of the Diesel-Electric Locomotive; Fundamentals; Lubricating and Cooling; Fuel System—Fuel; Pistons, Piston Rings, Liners; Connecting Rods, Bearings, Crankshafts; Valves, Timing, Heads; Governors, The Steam Generator; The Air Compressor; and The Gas Turbine Locomotive.

DESCRIBES LOCOMOTIVES BY MAKE

Separate chapters are devoted to accounts of diesel engines made by The American Locomotive Company, Baldwin Locomotive Company, Electric-Motive Diesel, Fairbanks, Morse & Company, and Lima-Hamilton Corporation. Each engine, its parts, and its non-electrical auxiliaries are described and illustrated in full detail.

SOLVES JOB PROBLEMS FOR YOU

MECHANICAL EQUIPMENT provides you with the most modern information on diesel-electric locomotives and auxiliary equipment in clear, easy-to-understand language. *If you have anything at all to do with operating, maintaining or servicing diesel-electric locomotives,* you'll use this book as a handbook to help you solve problems that you meet in your daily work, and as a reference to keep you on top of developments in this expanding field.

ELECTRICAL EQUIPMENT

You get full descriptions of all major pieces of electrical equipment and all their parts: how they are constructed, how to operate them, how to take care of them and how to fix them if they go wrong.

There are chapters on: The Electric Generator; The Traction Motor; Exciters, Auxiliary Generators, Motor Blowers, Dynamic Braking; Batteries; and Contactors.

DETAILS EQUIPMENT BY MAKE

The electrical and control equipment of the major builders: Alco-G.E., Electro-Motive Division, Lima-Westinghouse, Baldwin-Westinghouse, and Fairbanks, Morse-Westinghouse is completely analyzed in individual chapters.

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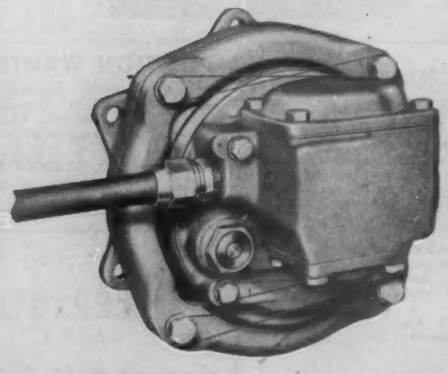

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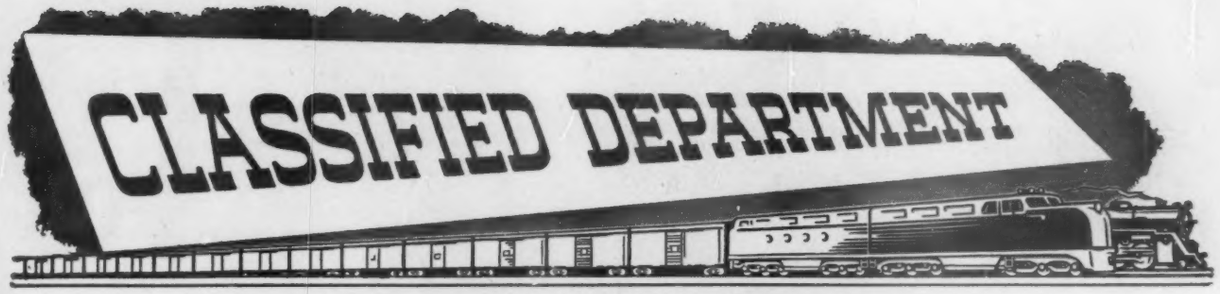

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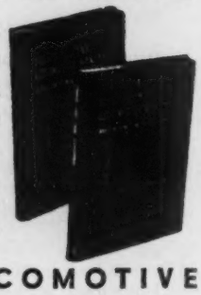

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